A

MANUAL

OF THE

NORTH ARCOT DISTRICT

IN THE

PRESIDENCY OF MADRAS.

COMPILED

By ARTHUR F. COX, M.C.S.,

ASSISTANT COLLECTOR AND MAGISTRATE, NORTH ARCOT DISTRICT.

MADRAS:
PRINTED BY E. KEYS, AT THE GOVERNMENT PRESS.

1881

915.48
C877M

4702

PREFACE.

THE compilation of this Manual was first undertaken in 1876, but when, at the close of that year, famine visited the district, little progress had been made, and for two years the work remained in abeyance, only being resumed at the close of 1878.

The statistics have mostly been brought up to the close of 1879, but in some cases I have thought it better to omit figures relating to years subsequent to 1876, as these have been wholly abnormal.

I have to acknowledge the ready assistance of most of the Native officials of the district, to whom I have had to apply for information of various kinds regarding their taluks or divisions. I would particularly express my obligations to V. Srinivásachári, Tahsildar of Wálájá; N. Chakravarti Nainár, the late Tahsildar of Chittoor; K. Prakásam Naidu, Tahsildar of Vellore; and Nammia Chetti, Tahsildar of Gudiyátam, all of whom have taken much interest in the work and rendered me very welcome and valuable aid.

The contributions of European officers are acknowledged where they are quoted. Mr. Bruce Foote, of the Geological Survey, as long ago as 1876, kindly promised an article upon the geology of North Arcot, but ill-health has unfortunately prevented his fulfilling the promise, and information upon this subject will be found to be meagre.

Every effort has been taken to secure accuracy in the compilation. My residence in the district has extended over more than six years, during which period I have had charge at different times of the Assistant's, Head Assistant's, and

Sub-Collector's divisions, and have visited those of the Collector and Deputy Collector, so that most of the descriptive notices of taluks and towns are the result of personal observation and inquiry.

ARTHUR F. COX.

HAMPSTEAD,
June 3rd, 1880.

ERRATA.

Page	8,	line	14	and elsewhere, for	*Poiny*	read	*Ponné.*
,,	12,	,,	45,	for	*South-east*	read	*South-west.*
,,	61,	,,	26,	,,	*defence*	,,	*attack.*
,,	76,	,,	40	,,	*that that*	,,	*that.*
,,	80,	,,	20	after	*his son*	add	*the Poligar.*
,,	85,	,,	37,	for	*Col. Cootes*	read	*Major Cootes.*
,,	136,	heading		,,	*Licenses*	,,	*Income Tax.*
,,	,,	,,		,,	*Customs*	,,	*Forests.*
,,	144,	line	6,	omit	*built.*		
,,	232,	,,	36,	for	*Nallani*	,,	*Nalladu.*
,,	274,	,, 17,	18,	,,	*Sálays*	,,	*Sálias.*
,,	275,	,,	19,	,,	*sowing*	,,	*sewing.*
,,	279,	,,	13,	,,	*Pagoda*	,,	*Pagada.*
,,	284,	,,	8,	,,	*Lálas*	,,	*Lála.*
,,	337,	,,	41,	,,	*Saffron*	,,	*Turmeric.*
,,	339,	,,	5,	,,	*their twine*	,,	*thin twine.*
,,	364,	,,	36,	,,	1871	,,	1811.

CONTENTS.

		Page
Chap. I.	General Description of the District	1
Chap. II.	Political History	20
Chap. III.	Revenue History	89
Chap. IV.	General Description of the Taluks and Towns	137
Chap. V.	Population and Castes	249
Chap. VI.	Industries and Manufactures	306
Chap. VII.	Miscellaneous	351

APPENDIX.

No.

1.—Statement showing the Number of Villages and Hamlets in the District of North Arcot, as they stood in Fasli 1286 415

2.—Statement of Rent Roll for Fasli 1286 (last Quinquennial Fasli Year) .. 416

3.—Statement showing the Prices of Grain for a series of Ten Years in the District of North Arcot, from 1869 to 1878 416

4.—Statement showing the Particulars of Cultivation, &c., for a series of Ten Years 1869 to 1878 (Faslis 1278 to 1287) 417

5.—Statement showing the Particulars of the several Zemindaris other than Ryotwar 418

6.—Statement showing the Collections under the several heads of Revenue in the District of North Arcot, for a series of Ten Years from 1869 to 1878 .. 418

7.—Statement of Exports and Imports by Railway in North Arcot, during the Year 1875, in Maunds of 82 lb. each 419

8.—Statement showing the Value of Suits disposed of in the Civil and Revenue Courts of the District of North Arcot, in the Year 1876 421

9.—Statement showing the Number and Nature of Civil Suits instituted in the several Classes of Courts in the District of North Arcot in the Year 1876 .. 422

10.—Statement showing the General Result of the Trial of Civil and Revenue Suits in the Courts of Original Jurisdiction, in the District of North Arcot in the Year 1876 424

11.—Statement showing the Business of the Appellate Courts in the District of North Arcot in the Year 1876 425

12.—Statement showing the Number of Suits, Original and Appeal, pending in the District of North Arcot, classified according to the Years in which they were instituted 426

13.—Statement showing the Execution of Decrees in the Civil and Revenue Courts of the District of North Arcot in the Year 1876 427

14.—Statement of Revenue Suits filed before each Revenue Officer in the North Arcot District in the Year 1876, and the Number of Appeals to the Collector. 428

No. PAGE

15.—Statement showing the Result of Appeal in Criminal Cases, in the District of North Arcot in the Year 1876 428

16.—Statement showing the Use of Juries and Assessors in the Criminal Courts in the District of North Arcot in the Year 1876 429

17.—Statement showing the Number of Cases filed before, and disposed of by, different Magistrates during the Years 1870, 1871, 1872, 1873, 1874, 1875, and 1876 in the North Arcot District 430

18.—Statement of Persons Tried, Convicted, and Acquitted, and of Property lost and recovered, for a series of Ten Years from 1870 to 1879, in the District of North Arcot 431

19.—Statement showing the Progress of Education in the North Arcot District for a series of Ten Years 434

20.—Statement showing Receipts and Expenditure for Special Funds for the last Five Years 436

21.—General Summary showing the Distribution of the Prisoners of all Classes confined in the Central Jail, Vellore, during the Years 1874, 1875, 1876, 1877, and 1878 436

21-A.—Statement showing the Religion, Age, and previous Occupation of the Convicts in the Central Jail at Vellore, during the Years 1874, 1875, 1876, 1877, and 1878 437

21-B.—Statement showing the Employment of Convicts as Prison Officers in the Central Jail, Vellore, during the Years 1874, 1875, 1876, 1877, and 1878 .. 437

21-C.—Statement showing the state of Education of the Convicts imprisoned, and released from the Central Jail, Vellore, during 1875, 1876, 1877, and 1878. 438

21-D.—Statement showing the Employment of the Convicts in the Central Jail, Vellore, during the Years 1875, 1876, 1877, and 1878 438

21-D.—Statement showing the Results of the Employment of Convicts in the Central Jail at Vellore, during the Years 1875, 1876, 1877, and 1878 .. 439

21-E.—Statement showing the Offences committed by the Convicts, and the Punishments inflicted on them, in the Central Jail, Vellore, during 1875, 1876, 1877, and 1878 440

21-F.—Statement showing the Sickness and Mortality among the Convicts in the Central Jail at Vellore, during the Years 1874, 1875, 1876, 1877, and 1878.. 440

21-G.—Statement showing the Expenditure in Guarding and Maintaining the Prisoners in the Central Jail at Vellore, during the Years 1874, 1875, 1876, 1877, and 1878, excluding the Cost of building new Jails, of Additions, Alterations, and Repairs 441

22.—Statement showing the Expenditure in North Arcot District on Public Works, from Imperial and Provincial Funds, for the last Five Years 442

23.—List of Heights above Sea-level of G. T. Stations, North Arcot District .. 442

INDEX 443

BENGAL SECRETARIAT LIBRARY

NORTH ARCOT MANUAL.

CHAPTER I.

GENERAL DESCRIPTION OF THE DISTRICT.

THE District of North Arcot lies between North Latitude 12° 21′—13° 56′ and East Longitude 78° 17′—80° 10′, and contains approximately an area of 7,361 square miles. It is bounded on the north by Cuddapah and Nellore; on the east by Chingleput; on the south by South Arcot and part of Salem; and on the west by Salem and the province of Mysore.

The name Arcot, now applied to the town in which the Nabobs of the Carnatic held their court, seems originally to have referred to a large tract of country lying on either side of the Pálár river. Here six rishis, or religious ascetics, are fabled to have lived a life of penance in as many jungle tracts or wildernesses, called in Sanscrit the Shadáranaya, or six forests. The Tamil equivalent was áru-kádu, whence came the name Arcot. There is hardly a considerable stream or village without its legend of the doings of some holy rishi in its neighborhood, of the wanderings of the five Pándavas, and less commonly of Ráma and Lutchman in search of the captive Sítha; but the same stories are told with variations in places widely distant from one another, and it is evident that the legends have by pious frauds been adopted from elsewhere, and incorporated in the local histories to add romance and importance to the vicinity.

Early legend recognises the fact that the whole of the country now comprising the district was a wild impenetrable jungle, inhabited by demons and ráchasas, whom the gods expelled. Adóndai, after conquering the Kurumbas, perceiving that the forests had been the residence of holy men, is said to have built many temples at Conjeeveram and elsewhere. Gradually much of the jungle was cleared, and the soil brought under cultivation. Ptolemy writes of the "Arcati regia Sora," which probably referred to this neighborhood, and from this we may infer that it was of importance in his day. Eventually the name appears to have been transferred from the tract to the town, which became the capital of the Carnatic Subah.

The Northern Division of Arcot was so called in consequence of its originally comprising only that portion of the Subah of Arcot lying north of the Pálár river, which was, in 1801, ceded to the Company with the rest of the Carnatic. The portion of the Subah south of the Pálár formed at first the Southern Division of Arcot. There have been repeated alterations in the composition of the district. After the cession there were added to the Northern Division the Zemindaris of Kálahastri, Kárvetnagar, Venkatagiri, Sydápúr, and Kangundi, with the Krishnagiri division of the Báramahál, and the district of Úsúr above the ghauts. In 1808, Venkatagiri, Sydápúr, and part of Kálahastri were transferred to Nellore, and the Usúr and Krishnagiri divisions, except the Kangundi Zemindari and the present Palmanér Taluk, were incorporated with Salem; while at the same time the five taluks immediately south of the Pálár were, with the Arni Jaghire, separated from the Southern and added to the Northern Division of Arcot. The Taluk of Satiavéd, and the Pulicat Division were also received from Chingleput. The district was then divided into the Taluks of Chittoor, Tirupati, Cuddapanattam, Sátghur, Tiruvallam, Kávéripák, Shólinghur, Arcot, Vellore, Tiruvettúr, Pólúr, Wandiwash, and Satiavéd, the Chittoor Páliems, with those of Mámandúr, Krishnápuram, and Karkambádi, the Jaghires of Arni, Avilkondah, and Désúr, and the Zemindaris of Kálahastri, Kárvetnagar, and Kangundi.

Pulicat was in 1818 restored by the Company to the Dutch, but was given back shortly afterwards and added to Chingleput. It was restored to North Arcot in 1824, and in 1850 was, with part of the Taluk of Satiavéd, given over to Chingleput. The rest of Satiavéd was added to the same district in 1860, when a reorganization of the Taluks was effected. Previous to this the Zemindari of Punganúr had, in 1856, been transferred from Cuddapah to North Arcot. The Jaghires of Avilkondah and Désúr were resumed in 1848 and 1826 respectively, and the Páliems of Mámandúr and Krishnápuram about 1848.

In 1860 Mr. Pelly, a Member of the Revenue Board, was deputed to rearrange the divisions of the district. After some discussion the number of the Taluks was reduced to nine in the following manner :—

The Chandragiri Taluk was formed of the Chandragiri and Tirupati Taluks.			
The Chittoor	do.	do.	former taluk modified.
The Palmanér	do.	do.	Cuddapanattam Taluk.
The Wálájá	do.	do.	Kávéripák, Shólinghur, and that part of Tiruvallam east of the Poiny.
The Gudiyátam	do.	do.	Sátghur and the rest of Tiruvallam.
The Vellore	do.	do.	old taluk of that name.
The Pólúr	do.	do.	Pólúr, with part of the Chetpat Taluk of South Arcot.
The Wandiwash	do.	do.	southern part of Tiruvettúr and Chetpat.
The Arcot	do.	do.	northern part of Tiruvettúr and old Arcot Taluk.

Since 1860 no material alterations have been made. The district now contains upwards of 4,500 villages and nearly 3,000 hamlets, and its revenue administration is in the hands of three or four covenanted, and one uncovenanted officers; their ranges being as follows:—

Collector.

	SQ. MILES
Palmanér	438
Punganúr	523
Extent of Range ..	961

Sub-Collector.

Vellore	455
Arcot	432
Gudiyátam	446
Kangundi	342
Extent of Range ..	1,675

Head Assistant Collector.

Wálájá	483
Kárvetnagar	943
Kálahastri	874
Extent of Range ..	2,300

Assistant Collector.[1]

Chittoor	785
Chandragiri	548
Extent of Range ..	1,333

Deputy Collector.

Wandiwash	466
Pólúr	443
Arni	183
Extent of Range ..	1,092
Total area of the district	7,361[2]

Natural Features.—The outline of the district is irregular and can hardly be described. It just touches the Pulicat Lake at one point on the east, and includes a portion of the Mysore plateau on the west. For the most part it is a hilly and mountainous country, with a pleasing diversity of scenery. The western and northern portions are

[1] Sometimes the district has no Assistant, and in that case the Collector usually takes the Chittoor Taluk, and the Head Assistant, Chandragiri.

[2] These areas are given from the results of the survey, which has been completed except in part of the Taluk of Chittoor, and the Punganúr Zemindari For these divisions of the district the areas are taken from the Census Report of 1871.

hilly and picturesque, while the eastern and southern are as a rule flat and uninteresting. The soil is fertile and well cultivated. Though a very large portion of its surface is covered with bare rocky hills, this characteristic affords opportunities for constructing numerous tanks, or reservoirs of water, by raising dams across the valleys. The rounded rock masses of the hills throw off the rainfall without absorbing it, and the frequent hill streams, thus fed, flow into the tanks, and filling them one after another cover the plain country with numerous sheets of water. North Arcot is one of the great tank districts of the Presidency. Many of its reservoirs might almost be styled lakes, the waterspread of the Kávéripák and Mámandúr tanks, which are hardly ever dry, being some seven or eight square miles.

The most extensive range of hills is that of the Eastern Ghauts. These enter the Kangundi Zemindari in the south-west of the district, and, passing northwards, gradually bend towards the east as far as the hills of Tirupati. Here the range is broken by a long valley which passes northwards into the Cuddapah District by the villages of Karkambádi and Mámandúr. Advantage has been taken of this interruption of the ghauts to carry the north-west line of the Madras Railway into the Cuddapah District, and so on its course to Bombay. East of the Mámandúr valley the ghauts once more rise, and follow a north-easterly course until they enter Nellore from the Kálahastri Zemindari. This range separates what used to be called the two Carnatics, viz., the Bála Ghaut or Mysore plateau, and the Payen Ghaut or plain country. The hills rise rather abruptly and support, like a terrace, the plateau, which is generally of an undulating surface, broken here and there by barren and lofty peaks. The general elevation of this part of the district is about 2,500 feet above the sea, an altitude which renders the temperature some 8° or 10° cooler than that of the lowlands. The plateau is however feverish and unpopular with the natives, and though the soil is generally fertile, the population falls as low as 90 to the square mile in Palmanér, while it stands as high as 550 in the Vellore Taluk below the ghauts. From the main line of the hills run numerous spurs for long distances towards the south and east, gradually diminishing in size and importance, until the appearance of the country becomes that of an almost undiversified plain.

Numerous passes lead from the lowland Taluks to those above the ghauts, but only three of these admit of wheeled traffic, viz., the Kallúr, Muglee, and Synigunta passes. The Kallúr pass, in the Chandragiri Taluk, runs along the Dámalcheruvu valley and through the Kallúr Páliem to the Pílér Taluk of Cuddapah. Along it passes the trunk road from Madras to Cuddapah, which is kept in excellent repair. The traffic is considerable, though less than it was before the construction of the railway afforded facilities for the transit of goods into the neighbouring district. The Muglee pass, in the Chittoor Taluk, commences at a point almost directly west of, and at a distance of some twenty miles

from, Chittoor, the head-quarters of the district. Through it runs the main road through Palmanér to Bangalore, and also to the sub-division of Cuddapah. The rise of the ghaut is gradual, and the road maintained in good order. The Synigunta pass leads from the taluk of Gudiyátam to Palmanér, where it unites with the road from Muglee. The ascent is steep, but the scenery very picturesque. The principal ascent from the plains to the plateau used formerly to be by way of the Naikenéri pass, on the western borders of Gudiyátam, and not far from Sátghur. Through this ascended the great trunk road to Bangalore, but the gradient was in parts so steep, and the roadway so constantly damaged by rains, that the route has for many years been abandoned, and cannot now be traversed easily on horseback. Besides the above, many other passes without regularly-made roads lead to the plateau. They are little more than mountain pathways, along which laden cattle are driven with some difficulty.

Though the Eastern Ghauts form the most extensive range in North Arcot, the Jewádi Hills are the most lofty, some of the peaks attaining an elevation of 3,000 feet. These hills are situated in the south-west of the district, and are separated from the Eastern Ghauts by the broad valley of Vániambádi. This valley narrows in the neighborhood of Ambúr, where the Jewádis and the ghauts almost unite, and then widens again as it leaves the district and passes into Salem. A large portion of the Jewádi range belongs to Salem, and South Arcot, but the precise boundary has never been laid down. The climate of the hills is most unhealthy, and the inhabitants, called Malayális, somewhat rude in their manners. The range extends in a north-easterly direction as far as the town of Vellore, gradually declining as it approaches the Pálár or stretches to the east. One high and partially detached peak, Kylása-drúg, 2,750 feet in height, is six miles distant from Vellore, and having a small bungalow upon its summit, forms a pleasant retreat during the extreme heats of summer. The Jewádis used to be covered with fine forests, but these were almost entirely destroyed when the construction of the south-west line of railway was in progress, enormous quantities of timber being at that time felled for sleepers. The jungle is now comparatively insignificant, but bison are still to be met with in the more wooded valleys, and smaller game is plentiful.

The level character of the south-eastern Taluks is continued for a short distance to the north of the Pálár. The spurs of the Eastern Ghauts run through the Chittoor Taluk into the north of Wálájá, and the west of the Kárvetnagar Zemindari. Through the latter estate runs a broad and fertile valley, which the north-west line of the railway traverses towards the Mámandúr gap already referred to. The valley is on the eastern side shut in by a range known as the Nagari Hills, which extends some forty miles northwards into the Kálahastri Zemindari. The hills, which present an appearance of having been suddenly upheaved by volcanic action, overlook the valley with high

precipitous cliffs, to the bases of which green slopes covered with bamboo and scrub jungle rise. This range is perhaps the most picturesque in the district. It is rich in forest, which, being under the control of the Zemindars, is being much denuded in order to supply the railway with fuel.

Geological Formations.—The geological formation of the district is of three kinds. The Jewádis, the Eastern Ghauts, and the spurs passing from them—that is to say by far the larger portion of the district—belong to the gneissic or metamorphic series, and this formation underlies, and occasionally crops up from beneath, the level plains of the south-east. The hills present a bare and rugged appearance, being rarely covered with more than a stunted scrub jungle. Long coarse grass grows everywhere among the rocks, affording pasturage to the miserable village cattle during the cool season, but during the dry months becoming parched and useless. The villagers then set fire to it, and the conflagrations rapidly spreading destroy the withered blades and form a fresh soil, from which at the advent of the rains new shoots spring up. The stunted jungle naturally suffers from such rough treatment, and wood sufficiently large for building purposes can only be cut in a few localities.

Associated with the gneissic deposits are found enormous bands of trap, occurring in the form of dykes. These may often be traced for many miles, and almost invariably follow a direction from east to west, rising vertically through the hills that they traverse. The trap rock is very hard, and in consequence often forms the backbone of lofty ridges of gneissic formation.

The formation of the north-eastern part of the district consists of conglomerates, and sandstones altered into quartzites, with limestone and volcanic rocks. Between Conjeeveram and Arcot whetstones and sandstones are procured by leather workers, but the grandest and most important beds are those of the Nagari Hills, which are many hundred feet in thickness, upheaved upon rocks of granite and gneiss intersected by trap dykes and veins of serpentine. The sandstones of these hills are of various colors, chiefly pale red, yellow, and white, both in large and small grains; some like quartzite, of flinty hardness, and others coarse-grained and too hard for general use as building stone. The hills have been compared with the quartzites and sandstones of the Table Mountain, at the Cape of Good Hope, both in their general outline and mineralogical character, and since coal and diamond conglomerates have been found some miles north of Table Mountain, it has been thought likely that they might be found in the neighborhood of the Nagari and Tirupati Hills, but no such discovery has yet been made. Near the southern base of the Tirupati Hills, which resemble those of Nagari, has been found an extensive bed of soft sandstone, or freestone, several hundred feet in thickness and running in a north-westerly direction for two or three miles. The stone is remarkably like the

freestones of Midlothian and Mirzapore, both of which occur on the borders of coal-fields.

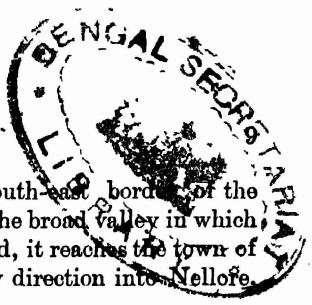
To these formations may be added the laterite beds of the Máderpák division of Kálahástri. This part of the district forms a detached portion near the sea coast, and its geological features resemble those of the neighborhood of Madras. The soil consists of red clayey conglomerates, gravels, and sands, the first predominating. The conglomerate is of a coarse kind, containing numerous quartzite stones, water-worn and smooth. The embedded stones are large and numerous in the neighborhood of the Nagari rocks, but decrease in size and number as the distance from those hills increases, till near the coast they are mere casual pebbles. The laterite when first dug is comparatively soft, but hardens on exposure to the air, forming an excellent material for revetting tanks or wells, building houses, or enclosing fields.

Minerals.—Among the gneissic hills iron ore is found in considerable quantities, in the shape of a black sand, and is, in some taluks, converted into very good iron and steel. In Pólúr magnetic iron occurs. Copper mines were once profitably worked in the Kálahastri Zemindari, but have long been abandoned. In 1802 Government ordered them to be opened, and, at the close of the year, a Captain Ashton offered to take a contract for working them for five years. The result of his undertaking cannot be ascertained from the district records, and the people of Kálahastri have now no recollection of the workings. Gold may perhaps exist in the Kangundi Zemindari, as mines of that metal have lately been worked in Mysore a few miles beyond the border, and the gold-bearing surface is believed to be several miles in extent. Lime is tolerably plentiful, while the gneiss rocks, which are found almost everywhere, furnish an inexhaustible store of excellent building stone easily quarried. Near Karkambádi and Mámandúr a deposit of clay slate occurs, but is not utilised. It overlies altered sandstone, and forms a sort of basin with Mámandúr in its centre. Mr. Oldham, of the Geological Survey, in 1863 gave it as his opinion that here was one of the only two spots in the Presidency where artesian wells might succeed if sunk to the depth of from 80 to 100 feet.

Rivers.—The direction of the watershed of North Arcot is, owing to its hilly character, irregular. The northern part, being a basin shut in on the west and north by the Eastern Ghauts, and blocked on the east by the Kárvetnagar hills, mostly discharges its drainage to the south, where it falls into the Pálár river. The western plateau also discharges to the south. The southern taluks slope gradually to the sea, in which direction their watershed runs. The rivers of Kárvetnagar also flow to the east, but the eastern portion of Chandragiri, and most of Kálahastri, are drained by the Suvarnamukki, which, at first flowing eastward, finally pursues a north-easterly course.

The Pálár is the most important river in the district, and divides it into two almost equal halves. It rises near Nandidrúg in Mysore, not

far from the origin of the Pennér. Fifty miles from its source the river enters North Arcot in the Kangundi Zemindari, and thirty miles further on falls through the gorges of the Eastern Ghauts into the Vaniambádi valley. Here the Jewádis throw it back slightly to the north, but it gradually assumes an easterly course, until it enters the Chingleput District. Above the ghauts its bed is narrow and rocky, but on the plains it gradually widens, having at Arcot a bed upwards of half a mile in breadth, filled with sand to a great depth. The next most important river is the Chéyár, which rises in the Jewádi Hills, and at first flows southwards into South Arcot. After leaving the highlands it bends to the east, with a slight tendency to the north, and, passing through the southern taluks of this district, unites with the Pálár near Wálájábad in Chingleput. Another considerable tributary of the Pálár is the Poiny, rising among the rocky hills in the west of Chandragiri. Its course is almost due south, and after receiving the waters of numerous smaller streams flowing from the Eastern Ghauts, it joins the Pálár not far from Arcot. Smaller affluents of the Pálár are the Ambúr and Gudiyátam rivers, which have a direction similar to that of the Poiny, and unite with the main river near the towns from which they derive their names. Substantial anicuts or dams have of late years been constructed across the Pálár, Chéyár, and Poiny, which feed large numbers of tanks. Smaller works of the same nature, but of ancient date, occur upon the smaller streams. The eastern centre of the district is drained by the Náráyanavanam and Kortalayár rivers. The former rises in the alluvial valley west of the Nagari hills, and, passing through a gap in the chain, flows eastwards past the ancient town of Náráyanavanam. The Kortalayár rises close to the Pálár river some six miles east of Arcot, commencing its course at the surplus weir of the Kávéripák tank, which is itself fed by the Pálár. Flowing to the north-west it receives the waters of the Tirutani and Nagari rivers, and discharges near Ennore. Some strange alterations in the courses of these rivers are observable. There are evident signs of the Pálár, or a large branch of it, having formerly passed down the valley of the Kortalayár, and a stream bearing the Sanscrit name Vridakshiranadi, or old milk river (*pál*, milk ; *ár*, river), still exists, uniting the beds of the two streams. The Nagari river, in the same way, formerly united with that of Náráyanavanam near Nágalápuram, but was diverted from its ancient course by an evidently artificial cutting, half a mile in length, which is still observable. This conducted it to the Tirutani river which unites with the Kortalayár. A tradition ascribes the diversion of the Pálár also to human agency, one Gunda Gopal Row, probably a servant of one of the Rájas of Conjeeveram, being credited with having banked up the course of the old Pálár in order to bring the whole of the river past that capital. At Kondápuram, near Kávéripák, an inscription upon the walls of the temple describes its position as being south of the Pálár, whereas it is now to the north of the river.



The Suvarnamukki rises just beyond the south-east border of the Chandragiri Taluk, near Pákála Passing along the broad valley in which the towns of Chandragiri and Tirupati are situated, it reaches the town of Kálahastri, and passes thence in a north-easterly direction into Nellore, disemboguing a little north of the Pulicat Lake.

For most part of the year these rivers are dry, and when during the rains heavy freshes from the hills come down, the currents are so strong that navigation is impossible. They are impassable for but a few days at a time, and the water subsides as speedily as it rises. Their beds are all composed of deep sand, and after the freshes have passed off channels called "kassam" are dug, and the underflow of water, which is constant, being thus tapped, is carried to the banks and forms a sure means of irrigating neighbouring lands. In the flat and sandy plains of the district, and in its well-watered valleys, similar channels are dug, and the water springing from the soil is utilised in raising wet crops

Forests.—The forests of North Arcot are of considerable extent, but not of any great present value, as they have been extensively felled to supply sleepers for the railway and fuel for its locomotives. The total extent of forest land is probably rather more than 1,800 square miles, of which about 675 belong to Zemindars, leaving some 1,125 square miles of Government forest land. Of this extent again some 650 miles consist of local jungles, so that there remain 500 square miles under the control of the Forest Department. The yearly revenue from the whole of the district must considerably exceed a lakh of rupees. Of this the Zemindars of Kálahastri and Kárvetnagar receive about Rupees 50,000, and other Zemindars or Poligars about Rupees 20,000 or 30,000, while about Rupees 40,000 is the revenue at present derived from this source by Government. The cause of this comparatively small income lies in the fact that Government forests are at present being carefully reserved, and nothing allowed to be cut that is not absolutely required by the people. There seems every probability of their yielding in a few years a far larger revenue, while the jungles belonging to private individuals will be shortly exhausted and the revenues derived from them decrease.

[1] "There are no first-class forests, and very little that could be called second-class. Beyond the small fuel reserve (four square miles) in the Chandragiri Taluk, there are no reserved tracts whatever. The Vellore and Pólúr Taluks, and one-third of the Chandragiri Taluk are under Imperial conservancy. Two-thirds of the Chandragiri Taluk, the Chittoor, Palmanér, and Gudiyátam Taluks, are under the so-called Local conservancy. These latter have, however, quite lately been placed under the charge of the Forest Officer, so that they are now properly looked after, with regular establishments, which is a great improvement, although the revenue goes to local purposes. In the Wálájá, Arcot, and Wandiwash Taluks there are no forests whatever * * *

"Traversed as this district is by two railways, besides being so near the

[1] Report of Conservator of Forests dated 30th December 1876.

capital of the Presidency, every stick is of value. There was however no attempt at any conservancy until long after the railway was opened, and all forest tracts everywhere in its vicinity had been terribly devastated. * *

"Though the forests of this district are neither first nor second class, and very poor in comparison to many of the Western Coast forests, they are, from their proximity to the railway and good markets, of great value to the State; and unless extensive management and demarcation be introduced they must annually deteriorate, and be encroached upon. * * * Building timber for the inhabitants will in time entirely disappear, unless there is systematic conservancy. It is already seriously affected; many communal rights must be seriously affected, if they do not entirely disappear, unless they are managed by the State, and there are many climatic conditions which, as time goes on, will be more and more apparent."

The principal forest trees are the Ácha (*Hardwickia binata*), Alanjee (*Alangium Lamarckii*), Alli (*Memecylon tinctoria*), Bamboo, male and female, Blackwood (*Dalbergia latifolia*), Billu (*Chloroxylon*), Buragu (*Bombax Malabaricum*), Chandanam, or Red Sanders (*Pterocarpus santalinum*), Chironchi (*Buchanania latifolia*), Goti (*Zizyphus jujuba*), Ilupa (*Bassia latifolia*), Jambu (*Prosopis spicigera*), Karri-velam (*Acacia Arabica*), Kundrichum (*Boswellia glabra*), Káttu-vágay (*Albizzia odoratissima*), Kálturanjee (*Albizzia stipulata*), Mango, Mailadi (*Vitex altissima*), Mushti (*Strychnos nux-vomica*), Nalla-madi (*Terminalia tomentosa*), Nammi (*Conocarpus latifolia*), Neem (*Melia azadirachta*), Pálay (*Mimusops hexandra*), Pagada (*Mimusops elengi*), Panasa (*Butea frondosa*), Pádri (*Stereospermum chelonoides*), Patsari (*Dalbergia paniculata*), Punga (*Pongamia glabrosa*), Sandra (*Acacia catechu*), Satinwood, Soap-nut (*Sapindus emarginatus*), Tella-madi (*Terminalia arjuna*), Turanjee (*Albizzia amara*), Tandra (*Terminalia valerica*), Tamarind, Tukki (*Diospyros melanoxylon*), Ulinda (*Diospyros capitellata*), Veltura (*Dichrostachys cineria*), Vodisha (*Cluytia collina*), Vágay (*Albizzia Lebbek*), Vél-vágay (*Acacia leucophlea*), Vénga (*Pterocarpus marsupium*), Wood-apple (*Feronia elephantum*). Of these the Turanjee is the most plentiful. It is a hardy tree, growing between the gneiss boulders of the hills, and when felled renews itself in six or eight years. The most valuable tree is the Red Sanders, used by the natives for carving idols, plates, &c., for rice-beaters, frames of carts, and door-posts, as whiteants will not touch it. It only grows in North Arcot, Cuddapah, and Kurnool, and is largely exported in billets as dunnage to Europe, where a red dye is extracted from it. Its color is garnet, deepening on exposure, and the dye, a permanent deep reddish brown, is extracted in alcohol. At present Red Sanders is being strictly conserved in this district, and the wood can only be procured from the Zemindaris, or from Cuddapah. Teak and blackwood, small but useful, and sandalwood, which is very valuable, are found in the Vellore and Pólúr jungles The two South Indian Sál trees (*Shorea laccifera* and *tambergia*) are valuable timbers, but not many ripe trees have survived overworking in past years, though a good deal is coming on. The graft mangoes of North Arcot, not of course found in the forests, but carefully cultivated, are celebrated. Much of the fruit is in the season

sent to Madras, and of late years Parsee merchants of Bombay have been considerable purchasers, importing the fruit by rail into that Presidency town. The jungle products are honey, bees'-wax, lac, barks, and seeds used in dyeing and tanning, soap-nuts, wild fibrous plants, medicinal herbs, and the like. These are collected, and sold free of tax, by the semi-aboriginal tribes who inhabit the hills, named Irulas, and Yánádies. On the Jewádis the more civilized Malayális both cultivate the soil and trade in jungle produce.

Ferœ Naturæ.—Game is not very plentiful in the district. Bison are found only on the Jewádis. Tigers now and again make their appearance on those hills and on the Tirupati range, but are scarce. Cheetas, however, are very numerous, the gneiss hills affording them good lurking-places, and are very destructive to village cattle. Bears, hyæna, sambar, spotted and barking deer, antelope, wild pig, and porcupines are common in all the larger jungles, as are pea-fowl, jungle fowl, and other feathered game of the country. The subjoined table shows the cost of keeping down wild beasts during two ordinary years.

Years.	Tigers.		Cheetas.		Wolves.		Other Animals.		Total.	
	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.	No.	Cost.
		Rs. A.		Rs. A.		Rs. A.		Rs. A.		Rs. A.
1865-66	4	115 0	18	180 0	3	15 0	..	210 6	..	520 6
1866-67	4	67 8	8	80 0	..	..	..	222 0	..	369 8

Rewards are not now offered for killing cobras. In 1873 one anna each was given and nearly 9,000 were produced and paid for. The number of reported deaths from wild beasts and snakes during three late years is shown below:—

Years.	Beasts.		Snakes.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.
1873	18	9	78	53	96	62
1874	13	13	84	49	97	62
1875	11	9	72	53	83	62
Average ..	14	10⅓	78	51⅔	92	62

No trade is carried on in the skins of wild beasts. These are presented in the various local Revenue offices, and a reward being paid, are retained by Government and sold by auction for a rupee or two.

Fisheries.—The fisheries of the district are carried on by a small section of the population in the various tanks which are scattered over the country. The right of fishing in the largest of these (Kávéripák) is annually leased out for nearly Rupees 1,000. Small tanks are left to be fished free of charge. A little sea-fishing is carried on in the

Máderpák division, where it touches the Pulicat Lake. The chief fishes caught in the fresh waters are these :—

Verrál (Tam.) Korraménu or Púla châpu (Tel.)	A very large fish about 3 feet long and very much prized.
Válai (Tam.) Válaga or Malugu (Tel.)	A fish about 3 feet long, but thinner than the preceding. It is not much eaten, as it is said to cause rheumatism.
Arinjal-kandei (Tam.)	A very excellent fish about a foot long.
Ulavé (Tam.) Isuka-danda (Tel.)	A very good fish 8 inches long.
Korravei (Tam.) Koradu (Tel.)	Resembles the verrál, but is only a quarter of its size.
Kulla-kandei (Tam.) Vulasa (Tel.)	A small bitter-tasted fish, generally eaten cured.
Asarei (Tam.) Pú châpa (Tel.)	A very small fish like whitebait, caught in streams during freshes.
Kellathi (Tam.) Jella (Tel.)	A very good small flat fish.
Yerra (Tam.) Royya (Tel.)	Prawns.
Velangu (Tam.) Pambú châpa (Tel.)	Eels.
Téli (Tam.) Télu châpa (Tel.)	A short flat-headed eel having something like a scorpion's nippers, whence the name.
Árál (Tam.) Bombadai (Tel)	A short mud eel 8 inches long.

The principal sea fish caught in Máderpák are called Madava and Koduvoy; they are of a large size.

Bráhmans, Jains, Komatis, Linga Balijas, Kammálas, and Yerlam Kápus never eat fish, but it forms an important item in the diet of the rest of the population, being consumed either fresh, badly salted, or dried in the sun. The spawn is deposited in December, and hatched in July or August. Fishing begins to be general in February, when the tanks get shallow, but is practised more or less all the year round.

Communications.—Few districts are so liberally supplied with means of communications as North Arcot. There are at present 170 miles of railway running through it. The Madras Railway enters the district at a distance of 34 miles from the Presidency town, and has a double line as far as the Arkónam Junction station; beyond this the line is single. The Bombay line branches off northwards from Arkónam, and the narrow gauge of the South Indian Railway runs southwards as far as Conjeeveram. It is proposed eventually to unite the latter with the main line from Madras to Negapatam at Chingleput. The south-east line of the Madras Railway continues from Arkónam to the Western Coast. The Bangalore branch leaves the main line at Jalárpet, in the Salem District, and passes through the Kangundi Zemindari.

Thus there are no less than four lines which pass through the district, most of which is within easy reach of railway communication. Unfortunately the lines have been arranged so as to be inconveniently distant from every important town, none of which are nearer than three or four miles from their stations. The error might have been avoided, and it to some extent prevents the railway from being as much used as it might be for local traffic. On an average six hundred thousand passengers, and upwards of a hundred thousand tons of goods are annually booked by the Madras Railway in North Arcot.

Years.	Passengers.	Tons of Goods.
1871	524,692	91,035
1872	580,647	115,218
1873	649,978	113,759
1874	635,813	90,127
1875	650,829	105,245
Average ..	608,392	103,077

There are more than 1,200 miles of good road scattered over the district, and maintained under the superintendence of the Department Public Works at an annual cost of nearly a lakh and a half of rupees. The principal lines are exhibited in the subjoined statement.

Names of Roads.	Miles.	Annual Cost.
		Rs.
Portion of the great western road from Madras to Calicut ..	72¾	10,960
Portion of road from Ránipet to Bombay *viâ* Palmanér, Punganúr, and Madanapalle.	82	16,000
Road from Pennatúr to Pálár river, *viâ* Vellore Railway Station, (Kátpádi).	9¾	2,440
Road to Kurnool from Chittoor by Púthalpat and Dámalcheruvu.	36	7,700
Road from near Ránipet to Chittoor *viâ* Poiny	26	3,900
Road from Palmanér to Mysore frontier	14	1,950
Road from Palmanéi to Kuppam Railway Station *viâ* Baireddipalle and Venkatagirikóta, with branches to Cuddapanattam and Thírtham.	54	4,200
Portion of road from Venkatagirikóta to Tiravallam from Bathanapalle, by the Gudiyátam and Vellore Railway Stations.	40	3,200
Road from Gudiyátam to Palmanér	25	2,750
Do. do. to Chittoor	24	2,200
Road from Punganúr *viâ* Saddam to Kallúr	34	2,040
Road from Púthalpat to Nayudupet on the great northern road *viâ* Chandragiri and Kálahastri.	63	7,120
Road near Puttúr Railway Station *viâ* Kotarlapalle to Chittoor.	38½	2,890
Road from Tirutani by Shólinghur to Poiny	36	2,700
Portion of road from Arkónam to Conjeeveram	9	1,350
Road from Nellore to Arni	23	3,450
Road from Arcot to Tiruvattúr with branches to Chakramallur and Kalavay.	26½	2,650
Road from Kannamangalam by Pólúr to the South Arcot frontier.	28	3,500
Road from Wandiwash to Pólúr *viâ* Chétpat	34	2,630
Road from Arni to Chétpat	18	1,800
Do. do. to Wandiwash	26	1,800
Road from Conjeeveram to South Arcot frontier at Vellimodu ..	39	4,870
Road from Arcot to Arni	18	2,700
Total ..	736½	94,800

This does not include several of the less important roadways, which are not kept in very good repair. The central taluks are the more liberally supplied, and the northern half of the district fares better than the southern. This partly results from the nature of the country, for while the hills of the north afford excellent road-making material, the sandy plains of the south present obstacles to the construction of good communications. The district is divided into two Local Fund Circles, each of which levies a road cess, out of which roads are formed and maintained. The southern circle is poorer than the northern one, and the cess collected is therefore not so ample for the construction and up-keep of expensive roads as in the northern taluks; great progress has however been made, and whereas until a few years ago there were few roads in the south along which a conveyance could be driven with comfort, there are now main lines of communication between all the chief towns, in fair order, and yearly under improvement.

The roads are fairly supplied with bridges. The Pálár is bridged at but one point, near Vellore, but it is under contemplation to build another bridge at Arcot. The Poiny very much requires one also near Tiruvallam. There are hardly any old avenues in the district, but most of the roads have promising young ones.

Manufactures.—Weaving is very extensively carried on in all parts of the district, though the industry appears to have decreased under the British Government, owing to the competition of English goods which are hawked about the villages. Between 1860 and 1870 the number of looms had decreased from about 20,000 to about 15,000, the decline being chiefly in Chandragiri, Kangundi, and Náráyanavanam. In 1870 it was estimated that eight million pounds of country twist, and thirteen million pounds of foreign twist were used, and the value of the cloths produced was given at 25 lakhs a year, which about represents the present outturn. The ordinary cloths used by the people are those generally woven, and the patterns of many are very good, but a peculiar kind of checked handkerchief is made in Máderpák for export from Madras. Dyeing is practised by a particular caste, called Rangári, in a few of the larger towns, particularly in Wálájápet, where also silk cloths are woven, as they are at Tirupati, and a few other places, by the Patnúlkárs Silk was itself once produced, though it seems never to have been more than a struggling, and insignificant industry, confined to a few Labbay villages in the western part of the Gudiyátam Taluk, where the last worms were seen in 1870. Coarse blankets (cumblies) are largely manufactured by the Kurumbas of the Mysore plateau, and carpets are made in large numbers, and of fair quality, though cheap, in Wálájápet. Very beautiful carpets are also turned out from the Vellore Jail, but this is not an indigenous industry, the convicts having been instructed by weavers brought from the Godávari district. Wandiwash is noted for its mats, made of a long rush which is specially cultivated for the purpose, and known by the name of kóré Labbays and Mahomedans are almost the sole manufacturers of these.

which in pattern and general appearance resemble the well-known mats of Pálghat, though they are coarser and very much less expensive. In Kálahastri glass has for a very long time been an article of export, the soil needed for the manufacture being plentiful in parts of that division. It is only used for making beads and bangles, and lumps of glass are sent in great quantities elsewhere to be fashioned. Tirupati is noted for its carvings of Red-Sanders. This wood is shaped into idols, toys, cups, plates, &c., in the production of which some taste and skill are exhibited. The same town is noted for its sandalwood-rubbing stones, made from the soft sandstone quarried in the neighbourhood. These are carried to all parts of India by the pilgrims visiting the sacred temple on the hill. A good deal of brass work is also executed at Tirupati, as well as at Vellore, but the Tirupati ware differs from that of other places in that it is often inlaid with silver and copper, while at Vellore the brass is merely wrought and engraved. Some of the Native patterns are particularly good, but an attempt to copy English ideas frequently mars the otherwise excellent design. In the Gudiyátam Taluk superior pottery is produced from a white clay, and in the Tirutani division one more than usually skilful stone-mason cuts vases and other articles out of a hard dark-colored stone found there. Iron is worked in many parts, but chiefly in Palmanér and Punganúr, which divisions are alone noteworthy for the excellence of their iron and steel goods: heavy knives are made and fairly tempered there.

Climate.—On the whole the climate of the district is healthy, because it is dry. The plain portion is hot, but never unbearably so, while the elevated plateau on the west enjoys a temperature which may in this country be generally considered charming, the heat in the middle of the hottest day rarely rising to 95° in the shade The only register kept of the temperature of the plains was recorded at Chittoor between February 1868 and January 1869, and the result was this—

Month.	Maximum.	Minimum.	Mean.
January	92°	85°	88·2
February	89°	74°	81·1
March	93°	78°	81·3
April	98°	81°	90·6
May	104°	87°	95·3
June	98°	82°	89·4
July	95°	79°	86·6
August	94°	82°	88·1
September	95°	79°	86·6
October	91°	79°	83·6
November	88°	76°	82·2
December	92°	85°	84·8

The prevailing winds from April to September are south-westerly by day, but from the east and south-east by night. September is usually a still, close month, with light and varying winds, perhaps the most trying season of the year. By October the wind shifts to the north-east,

and brings up the monsoon from that quarter, the signal for the commencement of the cool season. There are heavy rains during October and November, and the wind continues chiefly from the north-east until February, when its direction begins to shift, and it gradually veers round to the west. The land wind from this quarter brings in the hot weather, which is most severe during April and May. By June the south-west winds begin to carry up the south-west monsoon with occasional showers up to August. During these months the air is usually cool and pleasant.

The monthly rainfall for the years 1867 to 1876 is exhibited in the subjoined table Records were kept at nine stations.

Months.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	Average.
January	·30	2·44	..	·85	1·36	..	..	..	·32	..	·53
February	·18	..	..	..	·35	·07	5·75	..	..	..	·63
March	·13	..	·57	·34	2·53	..	..	·13	·22	·10	·40
April	·12	·29	·52	·08	·48	·07	·96	..	·18	·22	·30
May	1·11	1·31	1·08	·70	3·54	9·11	·77	9·61	2·32	2·22	3·18
June	·41	2·75	1·56	3·66	1·79	1·09	1·33	5·23	2·10	3·27	2·32
July	2·36	4·00	2·90	3·27	3·38	3·80	2·40	5·73	2·22	·11	3·02
August	4·55	2·20	3·77	5·74	2·19	6·78	10·95	2·49	9·30	1·17	4·91
September	2·14	4·40	7·38	4·56	9·59	3·69	7·05	16·75	3·40	1·73	6·70
October	3·27	5·77	1·43	11·36	5·10	6·90	8·76	11·41	3·55	1·78	5·93
November	·98	2·91	3·35	2·13	12·88	13·69	1·90	2·95	1·30	1·47	4·36
December	·49	·09	2·89	·81	·48	2·81	1·46	1·22	1·25	2·20	1·37
Total ..	16·04	26·16	25·45	33·50	43·67	48·01	41·33	55·52	26·16	14·27	33·65

The rains of October and November are chiefly used for the cultivation of rice and garden crops, while those of April and May, with the south-west monsoon rains, support the dry cultivation. This is perhaps the more important season of the year, since the dry grains produced at this time form the staple food of the majority of the population.

Cyclonic storms are not uncommon, and usually occur in May or October at the change of the monsoon. The most destructive, as far as North Arcot was concerned, occurred on May 2nd, 1872, when Vellore chiefly suffered. After a fall of nearly 14 inches within twelve hours some tanks above the town breached, causing the loss of many lives and the destruction of the whole of one of its suburbs.

Diseases.—Malarious fever may be considered endemic in many parts of the district, especially upon the Mysore plateau, and in parts of Kálahastri, Kárvetnagar, Chandragiri, Gudiyátam and Pólúr. It prevails chiefly during the last half of the year, after the rains. Leprosy is common, but not to any great extent. Small-pox is usually prevalent from February to May: rich and poor suffer alike when unprotected. Cattle disease of many sorts, but chiefly the foot-and-mouth disease is constantly breaking out.

Cattle.—The cattle of the district are not generally remarkable for any excellence. In Kálahastri a good many of the Nellore kind may be seen, but the ryots do not breed from them. Above the ghauts very

good bullocks and cows are found, the former of the Mysore breed, chiefly in Kangundi, and the latter in Punganúr, after which place they are called. Punganúr cows are celebrated for the amount of milk that they produce, but few pure specimens of the breed can now be procured. The sheep of the plains are the common long-legged red kind, but on the plateau, as well as in the west of Pólúr, a small black breed is met with, called Kurumba sheep, carrying a good deal of wool, which is extensively used for making cumblies. In 1852 an attempt was made to improve the breed by the importation of half-bred Merino sheep from Mysore, but they were found liable to disease and the experiment failed. A wretched lot of tats (ponies) is bred in Palmanér; but none of the other domesticated animals deserve notice.

Cultivation.—The area of North Arcot is approximately 4,962,160 acres, of which only about 2,766,000 belong to Government: of the latter extent nearly 700,000 acres are occupied out of 1,200,000 acres that are cultivable, the rest being uncultivable. Probably about the same proportions would be found to exist in the settled estates if accurate figures could be obtained. If so, not much more than half of the district is irreclaimable waste. The following table shows the holdings during a series of years in the Government taluks :—

Years.	Wet.		Dry.		Total.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.
1871 ..	204,288	11,67,025	490,529	6,74,919	694,817	18,41,944
1872 ..	200,256	11,43,343	462,078	6,38,893	662,334	17,82,236
1873 ..	194,621	11,13,601	438,245	6,08,054	632,866	17,21,655
1874 ..	204,160	11,62,081	454,173	6,29,992	658,333	17,92,073
1875 ..	184,505	10,64,955	446,773	6,19,830	631,278	16,84,785
1876 ..	135,546	8,01,666	428,087	5,98,935	563,633	14,00,601

The sources of irrigation in the Government taluks are exhibited below :—

——	Government.	Private.	Dasabundum.	Total.
Tanks	2,637	151	885	3,673
River channels	471	26	62	559
Spring do.	515	58	33	606
Anicuts	169	5	10	184
Wells	..	62,071	337	62,408

The chief food grains[1] raised are—

	ACRES.
Rice, on about	160,000
Kambu (Tam.), Sajja (Tel.), on about	100,000
Kávaru (Tam.), Rági (Tel.), do.	85,000

[1] This again refers only to Government taluks.

	ACRES.
Varagu (Tam.), Arikė (Tel.), on about	60,000
Chólum (Tam.), Jonna (Tel.), do.	30,000
Other considerable agricultural products are—	
Indigo, on about	15,000
Oil seeds, do.	50,000
Horse-gram, on about	35,000

As a matter for surprise it may be added that a little coffee is grown at Venkatagirikóta in the Palmanér Taluk, above the ghauts. The ryots, particularly those of the Telugu caste, are hard-working and intelligent farmers.

The following statement shows the revenue and expenditure on civil administration in various years :—

——	1810-11.	1820-21.	1830-31.	1840-41.	1850-51.	1860-61.	1870-71.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Total revenue ..	21,71,659	27,95,404	24,11,695	25,76,928	23,15,882	19,54,298	21,48,660
Expenditure ..	Accounts destroyed.				1,92,931	1,77,424	2,06,064
	Or in detail.						
Land revenue ..	13,60,882	20,03,218	14,79,512	16,70,226	16,40,034	12,59,901	13,11,891
Moturfa			33,430	35,588	38,663	20,724	..
Peshcush.. ..	4,21,216	4,21,047	4,50,953	4,50,953	4,44,186	3,63,597	3,65,266
Abkari	71,723	1,02,800	1,25,175	1,22,800	1,35,900	1,78,334	2,56,105
Stamps	..	..	..	27,744	29,526	97,606	1,29,495
License and Income-tax.	19,343	Included in Land Revenue.	8,264	8,569	6,528	34,136	85,903
Sayer (Customs).	1,06,215	1,45,000	1,79,340	1,40,140	..	..	..
Tirupati offerings.	1,92,278	1,23,337	1,18,301	1,00,867	..	..	..
Salt	..	..	16,668	20,039	21,045	..	..
Total Revenue ..	21,71,659	27,95,404	24,11,695	25,76,928	23,15,882	19,54,298	21,48,660
	Cost of Collection.						
Land Revenue ..	Accounts destroyed.					1,71,990	1,98,152
Abkari						..	1,213
Stamps						5,434	4,347
Income-tax ..						..	3,352
					Total ..	1,77,424	2,06,064

Trade.—Almost the whole of the exports from the district consist of agricultural produce, and the imports are chiefly salt, iron, cloth, twist, and betel-nuts. Statistics are only available showing particulars of the goods traffic by rail between the following stations :—

Madras and Púdi,
Do. and Tirupati,
Do. and Shólinghur,
Do. and Arcot,
Do. and Tiruvallam,
Do. and Vellore,
Bangalore and Arcot,
Do. and Vellore,
Beypore and Arcot,
Do. and Vellore,
Do. and Gudiyátam,

and these show that in 1875, which has been chosen as an ordinary year, the exports and imports were as follows:—

—	Exports in Maunds of 82 lb.	Imports in Maunds of 82 lb.
Rice	847,493	1,305
Paddy	12,630	21
Rági	5,277	4,246
Gram	7,000	3,722
Other grain	299	471
Jaggery	1,09,538	6,400
Salt	..	260,033
Coffee	601	115
Iron	416	8,595
Timber	16,283	3,038
Cloth	1,317	3,798
Twist	34	3,593
Cotton	..	12
Sundries	382,500	127,172
Total ..	1,383,388 mds.	422,521 mds.
or ..	50,642 tons.	15,466 tons.

This however only represents the transactions of seven out of sixteen North Arcot stations, with only three stations in other parts of the Presidency. The whole amount of the traffic sent from, and received into, the district by rail in 1875 has already been given as 105,245 tons, but much of the produce of the southern taluks goes by road to Pondicherry, and a good deal leaves the east of the district for Madras in the same way. The export of rice from the district is very remarkable, for the whole amount of that grain carried by the Madras Railway between all its stations was in the year in question less than 75,000 tons, and of this North Arcot contributed 41½ per cent. from seven of its stations alone.

CHAPTER II.

POLITICAL HISTORY.

THE district of North Arcot forms part of the country originally known by the name of Drávida. When, and by whom, it was first peopled is unknown. Its earliest inhabitants appear to have lived a wild and savage life among thick forests, and were described by the more civilized natives of the north as "foresters and mountaineers, goblins and demons." They were sometimes called Védars or huntsmen, uncivilized men who wandered about naked, without religion, kings, or marriage customs. Remnants of the aboriginal races are by some thought to remain in the Yánádies and Irulas who still live in the forest and barter jungle produce.

But the fertile plains of Drávida before long began to attract fresh immigrants, who settled along the sea coast and by the borders of the larger rivers. Professor Wilson is of opinion that the civilization of the south may be said to have commenced as early as the tenth century before the Christian era. Pliny writes of flourishing towns upon the Coromandel Coast, and Strabo, as well as Arrian, in describing the southern nations, does not contrast them unfavourably with those of the north.

There are no authentic historical records of the early races of Drávida. Inscriptions are found from which are gathered the names of various kings, with the dates of their reigns, but their statements regarding the extent of territory under each are unreliable and delusive. The early poems afford but slight assistance to historians, for in them fact is so blended with fiction that it is impossible with any approach to certainty to found upon them historical inferences.

The earliest important settlers in Drávida appear to have been the Kurrumbas, a fierce race so called on account of their cruelty. Attracted by the extensive seaboard of the country, which afforded an opportunity of engaging in commerce with other nations, they descended from Cárnátaca and overpowered the Védars. They are said at first to have had no ruler, but dissensions among themselves led them to choose a chief named Kómandu Kurrumba Prabhu, the first king of a dynasty known as that of the Pallavas. He divided the country into 24 divisions or kottams, in each of which he built a fort, and his territory extended from about Pulicat in the north to about Cuddalore in the

south, and inland probably as far as the Eastern Ghauts. One of the chief of their forts was that of Padavéd in the Pólúr Taluk. Others were probably at Mahéndravádi, Ambúrpet, Náráyanavanam, and Vallimalai where traces of old fortifications are met with.

Little is known of these Pallava kings. Their principal stronghold was at Púralúr, near the Red Hills, and Conjeeveram became their most important town. Traditions state that a very considerable sea trade was carried on by them with foreign countries, and this is confirmed by the discovery along the sea coast of Pallava coins, together with those of ancient Rome and China. A Jain missionary is also stated to have visited the people and converted them to his faith. Conjeeveram then became a stronghold of that religion, and many Jain monks found shelter in the town. A very large number of Jains still live in the neighbouring taluks of Arcot, Wandiwash, and Pólúr, as well as in South Arcot.

In the seventh century the power of the Pallava rajahs seems to have been at its height, but shortly after the Konga and Chóla kings succeeded in gaining several successes over them. The final downfall of the Kurrumbas was effected by the Chólas about the eighth or ninth century. Adóndai, the illegitimate son of Kollatunga Rajah of Tanjore, also known as Tóndiman Chakravarti, attacked the Pallava king in force, and a fierce battle was fought at Púralúr. In this the Kurrumbas were successful, and Adóndai was forced to retreat to Shólinghur. Encouraged there by a dream, he renewed the contest and defeated the enemy with great slaughter. The Pallava king was taken prisoner, and the brazen gates of the Púralúr fort were carried to the temple of Tanjore. After this success the petty Kurrumba chiefs were easily subdued, and their race almost extirpated. They are now found upon the Mysore plateau, where they are called Kurrubas, and employ themselves in grazing cattle and weaving coarse woollen blankets. Others fled westwards, and are found in a half-civilized state upon the slopes of the Nilgiris. Many facts would also point to the conclusion that the Yánádies and Irulas are remnants of the tribe. The name of the conquered territory was changed to Tóndimandalam (*Adóndaimandalam?*), and it was peopled by large numbers of Vellálas and other castes, who were brought over from the south and west of the peninsula.

Conjeeveram now became the capital of the Chóla kingdom, the limits of which appear at one time to have extended as far as the Godávari. The Chóla power, however, again declined, and the boundary of the kingdom was thrust back within the limits of the Tamil country where, carrying on a desultory contest with the kings of Telingána and Vijianagar, the Chóla rajahs were frequently reduced to the position of tributaries. By the close of the seventeenth century the dynasty came to a close, and its place was taken by the brother of the celebrated Mahratta leader Siváji, who founded the present family of Tanjore.

After the Chóla kings had been forced southward, the eastern part of Telingána seems to have been in the possession of a dynasty called

Yádava, but regarding the kings of this line we possess no authentic records, and only gather that one of their capitals was at Náráyanavanam, in the Kárvetnagar Zemindari, while Tirupati and Chandragiri were important places in their territories. It seems not improbable that they may have belonged to the Kurrumba race, as the name signifies shepherd, and the Kurrumbas of the plateau are all devoted to that occupation.

About the eleventh century comes into notice the Bellál family, a dynasty which is vaguely said to have ruled over the Tamil country, Cárnátaca, Malabar, and part of Telingána. The Andra kings attained to some importance at about the same period, but their territories did not extend so far south as the modern Carnatic. Their capital was at Warangal, 80 miles north-east of Hyderabad, and they as well as the Bellál rajahs were overthrown in the fourteenth century by the Mahommedans.

From this period the history of Southern India becomes clearer. The earliest of the Mahommedan invasions occurred in the year 1293, when Ramdéo, king of the Mahrattas, was attacked by Ala-ud-Deen, of the house of Khilji, and forced to pay an enormous tribute. Encouraged by their success, the Mahommedans made a second invasion in 1303 into Telingána, but this time were unsuccessful. For three years they were content to desist from further enterprises in the south, but after that period Ramdéo, having failed to pay his stipulated tribute, was once again reduced to submission by a Mahommedan army under the General Málik Káfúr, who continued his march from Déogiri, Ramdéo's capital, to Warangal, the capital of Telingána, which he took and exacted tribute from its rajah. From Warangal the victorious general marched still further south, defeated a Bellál army at Dwárasamudram, in Mysore, the capital of the kingdom, and reduced the whole of the country along the Eastern Coast as far as Rámésvaram. Having achieved this success, Málik Káfúr retired northwards.

In the course of ten years, however, the impression caused by this invasion began to wear away, and the southern kingdoms ventured to withhold payment of the tribute due to their distant lords at Delhi. In 1322 Ghyas-ud-Deen Tughlak was therefore constrained to send an army to coerce his tributaries in the Deckan, and the Rajah of Warangal, who had been the leader among the insurgents, was carried away captive to the north.

The kings of Vijianagar, already referred to, are among the most important of the various dynasties which have reigned in Southern India, and the tradition of the wealth, power, and splendour of their reigns is still proudly remembered by the inhabitants of its towns and villages. The kingdom appears to have first risen into notice after the subversion of the Bellál monarchy, when two Telingána princes,[1]

[1] Said by some to have been Kurrumbas.

named Bukkaráya and Harihará, founded it by a divine inspiration with the assistance of the learned Mádava Vidyáranaya, who became their prime minister.

The capital, from which the dynasty took its name, was situated upon the banks of the Tungabhadra, and from thence successive Vijianagar rajahs succeeded, during the fourteenth, fifteenth, and part of the sixteenth centuries, in carrying on a successful contest with their neighbours. During the reign of Mahommed Tughlak, in 1344, they were able, with the assistance of the rajah of Telingána and the Báhmani king Hassan Gangu, to expel the Mussulman garrisons from their territories; but constant attempts were made by the Mahommedans to recover their position, and the country was for some two centuries the scene of frequent wars. It is unnecessary to enter into a full account of the various kings of the Vijianagar line. Their territories appear, until the fifteenth century, to have been confined to the more immediate neighbourhood of their capital, and it was not until the reign of the fourteenth rajah, Narsing Ráyal, that they extended so far as the Carnatic. Narsing Ráyal greatly extended the territories bequeathed to him by his predecessors, and is said to have built, or at least improved, the forts of Vellore and Chandragiri, "the former for his occasional residence, and the latter as a place for the safe deposit of treasure." His son Krishna Déva Ráyal still further extended the territories which his father had acquired, and reduced the whole of the Tamil country to subjection.

The line of the Báhmani kings, who were the allies of Vijianagar in its struggle with the Mahommedans, was founded by some Moghul refugees from Guzerat, who were forced to flee to the Deckan from the cruelty and oppression of the Emperor Mahommed Tughlak. The refugees seized upon the town of Dowlatabád, where many who were exasperated by the excesses of the emperor joined them, and proclaimed an Afghan, Ismail Khán, as their chief. Ismail Khán soon resigned his leadership to Hassan Gangu, the ally of the Vijianagar Rajah.

A continuance of this alliance between states differing from one another in race and religion was impossible, and no sooner had the common enemy been disposed of than the Báhmani kings began a protracted struggle with the Hindu rajahs of Telingána and Vijianagar. During these contests the former dynasty was completely reduced, and the only two important powers in the south of India were those of Báhmani and Vijianagar. Of these the latter had by the sixteenth century become paramount over almost the whole of the country south of the Tungabhadra. "They exercised," says Marshman, "authority more or less complete over all the Hindu chiefs of the south. The revenues of Warangal, which were said to be enriched by the commerce of sixty seaports on both coasts, enabled the king to keep up a force with which no other single state was able to cope."

This condition of prosperity seems to have arisen in a great measure

from the dissensions which broke out in the Báhmani kingdom. After the death of Hassan Gangu it had gradually split up into five different governments, mutually jealous of, and frequently at war with, one another. In the middle of the sixteenth century the five rival Báhmani chiefs, or sultáns as they were called, perceiving with alarm the dangerous increase of power on the part of their neighbour at Vijianagar, resolved to unite in humbling him. The armies, therefore, joined for this purpose, and on January 23rd, 1565, was fought one of the most eventful battles in the history of Southern India—that of Telikóta. The Vijianagar army was routed, the reigning monarch, Rám Ráyal, was slain, and the kingdom in consequence fell to pieces.

Mutual jealousies among the victors prevented them from attempting to seize upon all the territory of the overthrown monarchy, and the result of the battle was that the country fell into the hands of various members of the late royal family, and some of the principal officers of the government, who continue to the present day under the titles of zemindars and poligars. Among others, the nearest relative of the deceased rajah, a brother, contrived to appropriate a fragment of the kingdom. After a short residence at Penukonda, in the Bellary District, he removed himself and his court to Chandragiri. Here he heard that the English, who in 1625 had moved their factory from Masulipatam to Armegaum, were dissatisfied with the results of their trade in that place. An invitation was, therefore, sent by the Kálahastri Poligar (a tributary of the rajah) to Mr. Day, the superintendent of the Company's factory, to settle within his dominions, which extended to the coast. The offer was accepted and Mr. Day visited the rajah in his palace of Chandragiri, where, in 1640, a grant was made of a small strip of land on the coast, the first ever possessed by the British in India. To protect themselves against the danger of attack from the restless and turbulent princes of the neighbourhood, a fort was built and named Fort St. George, after the traditional champion of England.

The results of the battle of Telikóta were eminently disastrous to the happiness and welfare of South India. The sun of the prosperity of Vijianagar set with the death of its rajah, and the wealth and grandeur of its capital soon sunk into insignificance. The accounts which we possess of those who visited the country at the close of the fifteenth and the opening of the sixteenth centuries show that evidences of the wealth and happiness of the provinces were everywhere apparent. Several large and prosperous towns exported their manufactures to the most distant parts of the globe; cultivation was widely extended, and trade at numerous seaports was extensively carried on. But as soon as the head, which had controlled the turbulent petty chieftains of the country, was removed, the land was given over a prey to pillage and rapine. Constant warfare deprived the cultivators of the power to till the soil in peace, or to reap the produce which they with difficulty succeeded in raising, and it was not until after very many years, when

a sufficiently powerful controlling authority once more kept the zemindars and poligars within bounds, that the country began to make any steady progress towards wealth and prosperity.

For seventy years after Telikóta the provinces continued a victim to these petty struggles between the numerous princes who had risen on the ruins of the Vijianagar kingdom. At the end of that period we find the king of Bijapúr casting his eyes upon the tempting bait which these feeble and disunited principalities offered to him. His kingdom formed one of the five into which the Báhmani monarchy had been resolved. Early in the sixteenth century he had asserted his independence, and from that time had been engaged in frequent contests with the Moghuls. Ahmednagar and Gólgonda were two more of the states which had arisen after the decomposition of the Bahmani kingdom, and they, like their neighbour at Bijapúr, were constantly at war with the Moghuls, besides being jealous of one another.

These contests and mutual jealousies so completely engrossed their attention that they had no leisure to turn their thoughts to the provinces of the south, which seemed to invite the interference of any ruler powerful enough to seize and hold their fertile territories. But at the close of the campaign of Sháh Jehán, in 1636, which closed with the treaty between that emperor and the Bijapúr sultán, the latter was left with the power and leisure to prosecute his schemes of aggrandizement in the south. The power of Ahmednagar had been extinguished in that campaign, while the rulers of Gólgonda and Bijapúr continued in a state of comparative independence, and for the next twenty years were able to carry war into the Carnatic. They did so, but instead of uniting to reduce the country, each separately proceeded against those poligars who happened to be nearest to his own territories. The natural result of their operations was that the petty principalities fell one by one under their sway. Vellore passed into the power of the Bijapúr state, while Chandragiri was acquired by Gólgonda.

These successes were not long in provoking the jealousy of the emperor, who took an early opportunity of checking the progress of his nominal vassals. In 1656 Adil Sháh, Sultán of Bijapúr, died, and his son imprudently neglected to pay the customary mark of homage on succeeding to the throne. Sháh Jehán therefore proclaimed him to be an illegitimate son of the deceased sultán, and a Moghul army, under the emperor's own son Aurangzíb, suddenly presented its appearance within the territories of Bijapúr. As a large portion of the army of that state happened to be absent in the Carnatic, the aspect of affairs looked gloomy, and it seemed not unlikely that Bijapúr would be shorn of its power and influence. But at this juncture news arrived that the emperor was dying, and Aurangzíb was unwillingly obliged to raise the siege in order to secure his own succession to the throne. Thus Bijapúr was allowed a respite of thirty years in which to consolidate and extend its power in the newly-conquered territory.

The history of a Mahratta family, which exercised a very powerful influence over the destinies of Southern India, has now to be noticed. This was the family of Sivaji. One Malloji Bhonslay, a captain of horse, having accumulated great wealth by the Mahratta expedient of plunder, purchased, soon after the beginning of the seventeenth century, certain jaghires at Púna and other places from the Sultán of Ahmednagar. These he bequeathed on his death to his son Sháhji, who, after repeatedly changing sides in the various conflicts between the Moghuls and their tributaries in the Northern Deckan, found it convenient, about the time of the treaty of 1636, to offer his services to the Sultán of Bijapúr, whose star then appeared to be in the ascendant. They were accepted, and Sháhji was entrusted with the command of one of the several expeditions into the Carnatic. So successfully did he fulfil his trust that he was rewarded with the grant of valuable jaghires in the neighbourhood of Bangalore, and his jaghire at Púna, being of inferior value compared with these new acquisitions, was handed over to his son, the celebrated Sivaji. But no sooner had the youth grasped the power which passed to him with the Púna jaghire, than he began to indulge in such wild excesses and such audacious schemes of plunder, that the father Sháhji was seized by his patron as a hostage and pledge of the good conduct of the son. For four years Sháhji remained a captive at Bijapúr, until it was found that, without his vigorous supervision, the Carnatic provinces had fallen into the utmost disorder. He was therefore restored to his command, of course with augmented importance, and before his death, in 1664, had acquired in addition to his jaghires around Bangalore, several others in the more southerly parts of the country.

After his father's release Sivaji, who had been somewhat sobered during Sháhji's captivity, resumed his career of indiscriminate plunder, and contrived to extend his authority over a large portion of the Northern Deckan. So rapid was the advance of his power that, in 1674, he was able to assert his independence and assumed the titles of royalty.

Ten years before this date his father Sháhji had died, and his southern jaghires passed into the possession of a half brother of Sivaji named Venkaji, who held them as a vassal of the Bijapúr state. Sivaji now conceived the bold design of making an expedition into the south and wresting from his half brother these valuable estates. With this view he entered into an arrangement with the Sultán of Gólgonda, by which the latter agreed to guard his northern possessions while he marched into the Carnatic to conquer, for Gólgonda, the provinces tributary to Bijapúr. This was of course a mere pretext to secure the aid of the Gólgonda state. The real object of Sivaji, as it soon appeared, was to acquire the southern provinces for himself.

Having thus protected his own kingdom he, in 1676, set out against his brother, and entered the Carnatic by the Kallúr Pass in this district.

The character of the Mahratta horse, half soldiers and half robbers,

is so well known that it is hardly necessary to describe the effect of this sudden invasion of the country by their plundering hordes. For miles around the line of their march were seen the smoke of burning villages and crops ruthlessly destroyed. Where, by good fortune, there had been some warning of their approach, villagers hastily forsook their homes, carrying with them what they could lay hands on, but the small detached bodies of the invaders moved with such rapidity that there was rarely an opportunity for flight, and before any plan of combined pursuit and reprisal could be formed the plunderers were passed far beyond reach. With these hardy and irrepressible troops Sivaji proceeded to reduce his brother's forts. Vellore, after a short and gallant resistance, was driven to a surrender, and its capitulation was followed by that of Arni and other strongholds in this and neighbouring districts. Even Gingee, the impregnable, was gained, but by treachery, and this, the chief stronghold of his brother, having been acquired, Sivaji may be said to have possessed himself of the whole of his father's jaghires. But, just as his success appeared complete, news from the north recalled him to the aid of his ally at Gólgonda, and he was forced to leave his newly-acquired territories under the charge of another half brother,[1] Santaji. The latter, however, left in possession with a reduced army, was gradually overpowered by Venkaji, and Sivaji eventually acquiesced in his retaining the provinces on a promise of receiving one-half of the revenues.

Meanwhile the Emperor Aurangzíb was not inattentive to what was occurring in the south. In 1686 he resolved to put a stop to the state of anarchy reigning there, and set out with an enormous army, with which he annihilated the monarchy of Bijapúr and rapidly brought the whole country into allegiance. But the submission of his tributaries was rather nominal than real, and he cannot be said to have had anything more than a military occupation of the country. The result of his interference with the kingdoms which had preserved a certain amount of order in the Deckan was to introduce confusion throughout the provinces. Repeated revolts involved him in a succession of battles and sieges. No sooner had one rebellion been suppressed than fresh conspiracies arose in other directions, and thus for years the unfortunate Carnatic, which had barely recovered from the effects of the inroad of Sivaji's horsemen, was once more overrun by the armies of the Moghuls on the one hand, and pillaged by the Mahratta cavalry on the other. It is difficult to imagine a condition more pitiable than that of the country at this period of its history.

Before this expedition from Delhi Siváji had died, and his son Sambaji, who succeeded him, was captured and put to death by the emperor,

[1] Wilks is of opinion that Santaji was no relative of Sivaji, but merely the commander of his forces

His infant son Sáhu was proclaimed head of the Mahrattas, while an uncle, Rám Rajah, was appointed regent. The Moghuls succeeded in capturing the youth, and Rám Rajah at once usurped the throne, establishing himself at Gingee. Here for eight years he withstood the not very energetic attempts of the Moghul general Zulfíkar Khán to reduce his fortress. His captains were let loose upon the Carnatic to demand contributions. Those villages which had the temerity to refuse compliance with their demands were plundered, while those who acquiesced were left with barely sufficient to ward off actual starvation.

After a siege of eight years Gingee was taken, but Rám Rajah escaped and fled to Vellore, whence he removed to Sattára, and surrounded himself with another large army.

After garrisoning Gingee, which was at first intended to be their head-quarters in the south, the Moghuls followed the Mahratta sovereign to the north, but though forts were taken, they were afterwards lost, and eventually the emperor was driven by his increasing difficulties to abandon his designs and to return to his capital, which twenty years previously he had left with such brilliant expectations. Those expectations had been disappointed, and he now found himself with an exhausted treasury, a demoralised army, and an authority utterly disregarded by the tributaries whom he had intended to reduce. Under the weight of these disappointments the emperor succumbed, and died at Delhi in 1707.

His death was followed by a contest for the succession among his sons. While the result of this remained uncertain, Zulfíkar Khán, the Moghul general, had the sagacity to remain neutral, but as soon as the success of the eldest son Moazzim seemed assured, he hastened to render his allegiance, and in return for his fidelity received the title of Viceroy or Subadar of the Deckan. Without taking up this appointment, Zulfíkar Khán nominated a Patán, named Davúd Khán, to act as his deputy, and the affairs of the Carnatic were for five years successfully administered by this officer, who established his head-quarters at Arcot, since Gingee had been found to be extremely unhealthy. After five years, in 1713, the viceroy was murdered on the accession of the emperor Feroksír, his deputy was removed from his subordinate government of Arcot, and one Chin Kilick Khán was honoured with the vacant appointment of subadar. He had already distinguished himself by his general acuteness and sagacity, and had received from Aurangzíb the titles of Asaf Jáh and Nizam-úl-Mulk, or Regulator of the State, by the latter of which titles he and his descendants have generally been known to the British.

Within a year of his nomination the Nizam was removed from his appointment, and one Hussain Ali, who had, with his brother, acquired great power in the emperor's court, was sent to supplant him. He had succeeded in incurring the jealousy of the emperor, who secretly endeavoured to procure his ruin. With this view Dávud Khán, now Governor

of Guzerát, was persuaded to attack Hussain Ali, but the attempt was unsuccessful, and the late Governor of the Carnatic was himself slain. The Mahrattas were next induced to harass the new viceroy, and so well did they succeed, that the unfortunate Hussain Ali, entangled on all sides, was obliged to purchase their good will by acknowledging Sáhu to be an independent sovereign, and assigning to the Mahrattas the right to collect "the fourth and the tenth of the revenues of the six soubahs of the Deckan and of the tributary states of Tanjore, Mysore, and Trichinopoly."

This acknowledgment of a Mahratta right to demand a portion of the revenues of these districts, known by the term "chout," was fruitful of misfortune and trouble to the inhabitants of the Carnatic provinces, for the Mahratta leaders found it remunerative to make inroads into the country, for the purpose of levying what they called their dues, whenever they happened to have no more important expedition on hand.

Having thus bought off the Mahrattas, Hussain Ali marched back to Delhi, seized upon the person of the emperor, and procured his assassination. After putting upon the throne two powerless puppets who died within a few months of one another, he with his brother proclaimed as emperor a grandson of Aurangzíb under the title of Mahommed Sháh.

Perceiving the disunited state of the kingdom the Nizam, Asaf Jáh, secretly resolved on seizing the opportunity for establishing an independent kingdom in the Deckan. His actions betrayed his scheme, and Hussain Ali marched with a large army to prevent the accomplishment of his design, but was assassinated before an encounter took place. The new emperor, who was heartily jealous of the restraint laid upon him by the two brothers, now attacked the survivor and succeeded in defeating his forces. Asaf Jáh was invited to accept the office of vizier, and obeyed the summons, but being speedily disgusted with the degeneracy of the emperor's court, he threw up the appointment and started off to Hyderabad. There he set himself to administer the affairs of the soubah, and paid but small regard to the allegiance nominally due to his suzerain at Delhi. From this time, 1724, the Nizam may be considered as a virtually independent sovereign.

Subordinate to the Nizam was the province of the Carnatic, under a deputy, or nabob, having the seat of his government at Arcot. Davúd Khán had been first entrusted with its governance, and when he, in 1710, was withdrawn to the province of Guzerát, one Sadatula was left to officiate. This he did until his death in 1732, when his nephew Dóst Ali assumed the administration of the province, but without applying for the sanction of his superior, the Nizam, who had then been established at Hyderabad for eight years.

The Nizam, however, happened at the time to be too busy with more important affairs to take notice of this omission, and Dóst Ali continued for a time in peaceful possession of his government. His administration, as well as that of his predecessor, is not remarkable for any

brilliant conquests, but is happily distinguished for its moderation and beneficence. The thirty years during which these two rulers administered the affairs of the province were fruitful in benefits to their subjects, and not a few of the important works of irrigation which are now found spread over the country are ascribed to their energy and large-mindedness. For the first time for years did the people enjoy a temporary respite from the hardships of war and rapine.

But even Dóst Ali could not at last resist the fascinating idea of conquest, and, in 1736, we find him carrying war into the division of Trichinopoly, the strong fortress of which he took and added the territories of its chief to his own. In 1740, however, he was called upon to defend himself against the aggressions of others. The invasion was from the Mahrattas, who sent a large army, represented as numbering 10,000 men, under a Mahratta general, Rághóji Bhonslay, who had acquired great power in Berár. The tribute granted to them by Hussain Ali had for years remained uncollected, and payment had not been insisted on from fear of the Nizam. Now, however, the latter encouraged them to invade his dependency, and the Mahrattas were only too ready to listen to his suggestions. There is also reason to suppose that the nabob's eldest son and the dewan Mír Asud had invited them to attack Chanda Sahib of Trichinopoly, who had aroused their jealousy. They kept the design secret from the nabob, expecting that he would take refuge in Vellore or Arcot, and allow the invaders to pass on to Trichinopoly.

Dóst Ali had, however, more spirit than they anticipated. He had hardly heard of the Mahratta advance than he received intelligence that Rághóji had actually gained the head of the ghauts and was preparing to descend by the Kallúr Pass. Hastily sending off word to his son Sufder Ali to hurry to his assistance, he advanced with some 4,000 cavalry and 6,000 foot to oppose the enemy, and fixed upon Dámalcheruvu, in the taluk of Chandragiri, as a spot where he could with success make a stand until reinforcements should arrive. At this place high hills close in the valley which leads up to the pass of Kallúr, and across it an entrenchment was constructed, behind which the nabob's artillery was posted. Even now a long line of earthwork is to be traced, crossing the valley and ascending the hills on either side. The villagers assert that it was constructed long ago to mark the boundary between the territories of the Chóla kings and their northern neighbours. Probably Dóst Ali did find an earthwork thus ready at hand. The invasion was so unexpected that he would hardly have had time to raise so extensive a line of defence. In the rear of this entrenchment the nabob drew up his forces and awaited the attack. The Mahratta leader, however, had recourse to intrigue, and succeeded in corrupting one of the Hindu officers in the nabob's army—some say the Pulicherla Poligar—who allowed the enemy to pass to the rear of the defences in the darkness of night (perhaps by the Mangal-

penta valley), and to attack the nabob in the rear; under these circumstances Dóst Ali's artillery was useless, and though his troops maintained a stubborn resistance for many hours, the death of their ruler and his son Hussain Ali produced the usual panic. They broke and fled, leaving vast numbers upon the field of battle. The dewán was among the prisoners, and few of the nabob's officers survived the battle. In the district records appears a reference to a lofty mound, said to have been in existence in 1804, and to have been called by the villagers the "Bhúmigutta." It is described as "the memorial of a great battle," probably that of Dámalcheruvu. It is now impossible to identify the spot or to obtain any information regarding it.

Sufder Ali had meanwhile hurried up from the south and had reached Arcot, when information of the disastrous issue of the battle reached him. Dismayed at the perfidy of the Mahrattas in converting a mock invasion into a real one, he threw himself into the fortress of Vellore, which was the strongest in the Carnatic, and sent word to the captive dewán to sue for terms. These were at first refused, as the Mahrattas had not yet exhausted the resources of the country, but when no further prospect of plunder remained, Rághóji consented to quit the Carnatic on payment of one year's revenue, a sum equivalent to a crore of rupees. Hard as the terms were, Sufder Ali had no alternative but to comply, and on these conditions a treaty was ratified. The Mahratta army retired, and Dóst Ali's son assumed the title of nabob.

Up to this time the court had been held at Arcot, but the defences of this fort were greatly inferior to those of Vellore. So terrified was Sufder Ali at his recent reverses, that he appears to have removed his head-quarters from Arcot to Vellore. Báker Ali, brother of the deceased nabób, had lately been its governor, and was succeeded by his son Mortiz Ali,[1] the "most truculent prince in the Deckan." He had married a sister of Sufder Ali, and by his parsimonious management of his jaghire, had amassed enormous wealth. The nabob was aware of this, and, at a loss to know whence he could obtain funds to pay off the enormous demand of the Mahrattas, as well as some heavy arrears which were due to the Nizam, he asked for a large contribution. The demand was met with a ready compliance in words, but the governor of Vellore was not the man to part with any portion of his wealth without compulsion. Wearied out with repeated but unfulfilled promises, the nabob imprudently threatened his cousin with dismissal from his appointment, and the latter, stung by the disgrace of such a threat, determined on revenge. An opportunity soon presented itself. In October 1742 occurred the feast of the Mohairam, when most of the nabob's retainers obtained leave of absence to spend it with their friends. An attempt to poison Sufder Ali failed, and Mortiz Ali was therefore constrained to have recourse to violence. A Patán, who had a personal

[1] More correctly Murtúj á Khán.

grievance against the nabob, was easily persuaded to become the instrument in the plot. Attended by some Abyssinian slaves, the assassin entered the chamber in the fort occupied by the nabob, overpowered his guards, and seizing his victim as he was attempting to escape by a window, stabbed him to the heart.

The news of this crime roused the troops without the fort to a display of unexpected indignation. They announced their intention of storming the walls, but the astute governor held out promises of discharging the arrears of pay due to them, and thus induced them to sink their resentment and to acknowledge him as nabob.

The court once more returned to Arcot, where Mortiz Ali assumed the ensigns of royalty. But his occupation of the throne was short-lived, for although he possessed abundant means for satisfying the demands of his army, he was short-sighted enough to withhold the promised pay, and the exasperated soldiery, perceiving that they had been duped, withdrew their allegiance and went into open revolt. Mortiz Ali was obliged to escape to his own fortress of Vellore in the disguise of a female, there to meditate upon the act of folly into the commission of which his avarice had led him.

The commanders of the Carnatic army now summoned Mahommed Ali, the infant son of Sufder Ali, and his mother from Madras, and proclaiming the minor nabob, placed him under the charge of his uncle Tuckia Sahib, who had been entrusted with the governorship of the fort of Wandiwash.

News of the unsatisfactory state of affairs in the Carnatic had of course been brought to the Nizam, but ever since the assumption of the nabobship by Dóst Ali, he had been unable to interfere owing to his political relations with the court of Delhi. These having at length been satisfactorily arranged, he gathered around him an enormous army, consisting it is said of 80,000 cavalry and 200,000 infantry, with which he marched to the southern capital. As resistance to so overwhelming a force was out of the question all parties submitted, and the Nizam, confirming the youthful Mahommed Ali as nabob, appointed one Anwar-ud-deen to be his guardian.

One of the first steps of Anwar-ud-deen was to remove his ward from Wandiwash to Arcot, where he lived in security until June 1744. In that month a wedding between some members of his family took place, and was celebrated in the palace of Arcot. All went well for a while, but on the evening of the day on which the concluding rite took place, while the youthful nabob was descending the steps of the palace to greet his guardian on his arrival, a Patán soldier advanced, and, before he could be prevented, plunged a dagger into his breast.

The whole palace was, by this incident, thrown into confusion, in the midst of which Mortiz Ali, who was among the guests, succeeded in making his way to the gate of the fort, and, summoning his retainers around him, hurried back to Vellore.

It has never been satisfactorily ascertained who was the originator of this plot. The assassin was unfortunately killed on the spot, and the question has therefore been left for ever in doubt. Many suspected Anwar-ud-deen, but more threw the guilt upon Mortiz Ali, who certainly was capable of the crime. Anwar-ud-deen, however, was the only one who derived any advantage from the death of the young prince. He succeeded at least in persuading his patron, the Nizam, of his innocence, and was by him elevated to the vacant throne. He thus became the ancestor of those nabobs of the Carnatic from whom the cession of the country was subsequently obtained, or rather enforced, by the English Government. Sadatula and Dóst Ali had been such benefactors to the Carnatic, that the people clung to their family with a romantic affection, and the alienation of the throne to a stranger was regarded with universal regret and dissatisfaction. No aspirant to the nabobship who claimed a connexion with the old and much-loved line was ever without the sympathy and support of the people; and it will be seen how the French endeavoured to take advantage of this widespread feeling when attempting to establish their power in the Carnatic.

It is hardly necessary to narrate the circumstances which led to the grant of the various charters which were at different times obtained by the Company, or to describe the gradual increase of their trade along the Coromandel Coast. France had entered the lists as a competitor in commerce, and the factories of the two countries carried on a friendly rivalry in the Indian trade for many years, though there had been war between the two nations at home. Neither had as yet conceived the idea of attacking its enemy by aiming a blow at his trade in the East; but in 1744, when a fresh war broke out in Europe, the design was entertained by the French and carried into effect.

Great was the consternation at Fort St. George when news of the unexpected danger arrived, and little did the English settlers imagine that this hostile movement on the part of the French Ministry would prove the circumstance which in the course of time would force upon the Company the acquisition of an empire in India. The opening events of the conflict gave no promise of such a result, for Madras was, in 1746, taken by a French force under Labourdonnais, and was only evacuated after the payment of a ransom.

Up to this time the Government of Madras had not come into collision with any of the Native states in the neighbourhood Now, however, intimation of the operations of the French against Madras reached the nabob, and was received with great displeasure. He forthwith despatched a remonstrance from Arcot, against what he characterized as the presumption of the French in attacking a settlement which was under his protection. His anger was easily appeased by a promise that he should share in the ransom paid by the English. This promise however remained unfulfilled, and the indignant nabob sent his own son to Madras with 10,000 troops, a force which he fondly imagined would

be more than sufficient to expel the small French garrison from Fort St. George. The result showed how greatly he had overrated the powers of his troops when matched against European soldiery. The ten thousand were scattered like sheep before a thousand of the French, and retreated in the utmost disorder to Arcot.

Irritated by the disgrace of this defeat, Anwar-ud-deen was not unwilling to listen to the solicitations of the English when they applied for aid in defending their factory at Fort St. David. A considerable body of men was lent for that purpose, and the vanity of the nabob was gratified when a sudden and unexpected attack upon the French resulted in their being driven back to Pondicherry. Dupleix, the French commander, however soon succeeded in bringing to a close the alliance between the nabob and the English. He held out a prospect of great pecuniary advantage as resulting from a change of sides, and persuaded Anwar-ud-deen that his present allies were in reality the weaker party, a persuasion which was confirmed by our disgraceful failure at the siege of Pondicherry. The nabob therefore elected to cast in his lot with the victorious French.

The treaty of Aix-la-Chapelle, in 1748, closed the war in Europe, and restored to the Company their settlement at Madras. It should have closed the contest between the two nations in India, but Dupleix, who was at the head of affairs at Pondicherry, perceived that his power was really superior to that of any other state around him, and he therefore conceived the ambitious design of turning his superiority to the establishment of a French empire in India. For the accomplishment of his plans he further resolved to take advantage of the general unpopularity of the reigning nabob.

One of the daughters of Dóst Ali had married, some years previously, a popular and distinguished officer named Chanda Sahib. This prince was in possession of the strong fort of Trichinopoly, where his increasing influence had excited the jealousy of his brother-in-law Sufder Ali. The latter induced the Mahrattas, ever ready for such an enterprise, to attack Chanda Sahib in Trichinopoly. The fort was taken, and its gallant defender was carried away captive to Sattára. His wife and family, having been placed in Pondicherry for greater security, escaped his fate, and it was by means of them that Dupleix proposed to carry out his plans.

Through Chanda Sahib's wife he entered into negotiations with the Mahrattas, and at last purchased the release of their captive at the price of seven lakhs of rupees. Chanda Sahib, on obtaining his freedom, enlisted a considerable army and marched towards the Carnatic ; but before he entered its confines an event occurred which made his chances of success appear more hopeful. This was the death of the Nizam, at Hyderabad, followed of course by the usual struggle for the throne. The second son of the deceased sovereign, having command of the army, seized on the control of affairs, but a grandson, named Mozuffer

Jung, asserted that his claim to succeed had been recognized by the emperor himself, and Chanda Sahib resolved on throwing in his lot with the second of the two claimants. His offer of assistance was accepted the more readily because it involved the alliance of the French, who were at that time regarded as a great military power in the country.

The direction of the united forces of Mozuffer Jung and his ally was southward, into the Carnatic, where Chanda Sahib had always been popular on his own account, and was, moreover, regarded with favour as a representative of the old line of nabobs. The army of the adventurers was therefore rapidly augmented during its progress through the provinces, and when, in July 1749, it descended the ghauts and encamped at the head of the Ambúr valley, its numbers amounted to some 40,000 fighting men.

Anwar-ud-deen had lost no time in preparing to oppose the invaders, and had taken up his position near his hill-fort of Ambúr. Here, following the example set by Dóst Ali at Dámalcheruvu, he constructed an enormous entrenchment, behind which he stationed his artillery, served by some vagabond Europeans. The large tank, situated on the side of the valley opposite to the fort, was breached in the hope that it would render the ground lying in front of the entrenchment heavy, and thus impede the enemy in their attack. This ingenious device, however, seems not to have answered the expectations of the nabob.

Preparations for the battle were completed on the side of Mozuffer Jung by July 23rd, and the task of storming the works was entrusted to the French contingent, which was under the command of an officer named D'Autreil. His first assault was repulsed by a well directed discharge of artillery, and the second, though more successful, resulted in the French being forced back after a desperate struggle of half an hour. The partial success of this attack served however to damp the courage of the defenders of the entrenchment, for, upon the demonstration of a third assault, they forsook their guns and fled.

The distress of Anwar-ud-deen at this repulse of his troops was great, and aggravated by a report which reached him that his son Morfiz Ali had fallen. Filled with rage and despair at this blow, more grievous than defeat, he thought only of revenging himself upon Chanda Sahib, the enemy of his family, and pointing to the spot where he perceived the standard of that prince advancing, he urged the mahout to guide his elephant in that direction. But, before he reached his intended victim, a bullet from a passing French battalion struck him, and he fell dead in his howdah. All hope of making a further stand was now gone: a general rout ensued, and the whole of the cannon, elephants, horses, and camp equipage of the defeated army fell into the hands of the invaders.

On the day after the action Mozuffer Jung marched to Arcot, where he proclaimed himself Subadar of the Deckan, and invested Chanda Sahib with the title of nabob.

By this time Názir Jung, the other competitor for the nizamship, had collected an enormous army, numbering 300,000 men, and marching rapidly through this district, pursued his nephew towards Pondicherry, whither he had gone to visit M. Dupleix. The armies met at Valdaúr, near the French settlement, and in the action which ensued Mozuffer Jung was utterly defeated, and was treacherously committed to prison after he had been induced, by promises of protection and safety, to surrender himself.

This defeat of his ally was an inconvenient check to the designs of Dupleix, but he resolved if possible to retrieve his position by intrigue, in the practice of which he was an adept. The conduct of Názir Jung encouraged his hopes, for after the battle of Valdaúr the victorious army retired to Arcot, where the Nizam gave himself up to ease and luxury. He also sent back a large portion of his troops to the north, apparently imagining that the hopes of his enemies had been completely extinguished. Events, however, soon proved that such was not the case. Mahommed Ali, son of the late nabob, was closely besieged by Chanda Sahib at Trichinopoly, and Gingee was soon after taken by a French force. The Nizam, therefore, perceived that something must be done, and, unwilling again to take the field, he sought for an alliance with the French. Dupleix demanded as his price the release of Mozuffer Jung and the acknowledgment of Chanda Sahib as nabob of the Carnatic. These terms were rejected as preposterous, and preparations were made for a renewal of the campaign.

Názir Jung now seemed to be forsaken by his wonted energy. Becoming disheartened by the further reduction of his army through sickness and scarcity, he at last yielded to the demands of the French, and without trying the hazard of a battle, agreed to sign a treaty dictated by Dupleix.

While carrying on these negotiations Dupleix had been playing a double game, and had entered into a plot with three powerful Patán nobles in Nazir Jung's army, whom he found willing to betray their chief. They had succeeded in bringing over with them some twenty other principal leaders on the Nizam's side, and the conspirators actually commanded one-half of the whole army. His arrangements with these traitors having been matured, Dupleix ordered up a detachment from Gingee to attack the unsuspecting prince, who had only on the previous day signed the treaty. After a march of sixteen miles the detachment came upon the commencement of Názir Jung's camp, which lay spread out over a breadth of about eighteen miles north of the Chéyár river. The advanced posts were easily disposed of, but a sharp contest took place between the French troops and the Nizam's artillery, supported by 25,000 of his infantry. Desperate charges were made and repelled by the French, whose artillery, better served than that of their enemy, did enormous execution upon the dense masses of their foes. Reinforcements kept continually pouring in to take the place

of those bodies of the Nizam's troops which had been scattered by the rapid discharge of the French cannon, and it was only with the utmost difficulty that Názir Jung's artillery was at length disposed of. For three hours the detachment fought its way through the contending bodies of the enemy, and when at last it had penetrated to the Nizam's head-quarters, a formidable host appeared advancing. Dismayed at the sight the wearied troops were almost losing courage, but they soon perceived the signal of the confederates, a large white flag hoisted upon an elephant's howdah. All anxiety was now at an end, and the news brought by the conspirators showed that there was no need for further exertion since Názir Jung was dead.

That unfortunate prince had not at first been able to persuade himself that the attacking party was in reality a portion of the army of the French, with whom he had just concluded a treaty, but messenger after messenger arrived with tidings confirming the report. Still he refused to believe in the serious nature of what he termed "the mad attempt of a parcel of drunken Europeans" to surprise his camp. Being informed of the inaction of a large portion of his army, he at once mounted his elephant and proceeded to the spot where the inactive battalions were drawn up in line of battle. He first came upon the contingent of the Nabob of Cuddapah, one of the leaders in the treason, with their chief at their head. "Názir Jung," writes Orme, "rode up to him, and told him that he was a dastardly coward, who dared not to defend the Moghul's standard against the most contemptible of enemies. The traitor replied that he knew no enemy but Názir Jung, and at the same time gave the signal to a fusilier, who rode by him on the same elephant, to fire.* The shot missed, on which Cuddapah himself discharged a carbine, which lodged two bullets in the heart of the unfortunate Názir Jung, who fell dead upon the plain."

The result of this treason was that the captive Mozuffer Jung was at once proclaimed Nizam, while Chanda Sahib was declared to be nabob. The former, however, did not long survive to enjoy his new dignity. While returning to Hyderabad, the same three nobles who had betrayed Názir Jung revolted against his successor, and before the revolt was quelled one of them, the Nabob of Kurnool, despatched his new master by thrusting a javelin through his brain.

Bussy was in the camp, and, calling around him a council of chiefs, persuaded them to acknowledge as Nizam Salabut Jung, third son of Asaf Jah, who was at the time a captive with the army.

While these events were occurring in the north, Mahommed Ali continued closely besieged in Trichinopoly. The Government of Madras had ere this begun to regret the error into which they had fallen in allowing the French to gain so great an influence in the country. A detachment was, therefore, sent to the relief of the garrison in Trichinopoly, but so largely were the British troops outnumbered, that there was small prospect of success. Clive, who held a captain's commission in the

detachment, returned to Madras on business, and, while at the presidency, suggested the advisability of creating a diversion by attacking Arcot, the capital of Chanda Sahib. His suggestion was approved, and he was himself entrusted with the command of a small force of 200 Europeans and 300 sepoys with eight field pieces. Of the eight officers who accompanied this little army four, including Clive, had but recently been writers in the Company's service, and only two out of the whole number had ever been in action.

On August 25th, 1751, the party started from Madras, and five days later marched into camp, ten miles from Arcot, through a severe tempest of thunder, lightning, and rain. It is said that their undaunted demeanour during the storm gave the enemy's spies such an idea of the valour of the British force, that they hurried panic-stricken to Arcot, and so demoralised the garrison there, that they abandoned the fort. Certain it is that when Clive the next morning reached the place, he met with no opposition, and at once took possession of the citadel.

Having first laid in a supply of provisions he proceeded to beat up the fugitive garrison, and had several skirmishes with them, in which they were invariably defeated. The result aimed at by this manœuvre was soon attained. Chanda Sahib receiving news of the capture of his capital, detached 4,000 of his own troops, with 150 of the French, under the command of his son Rajah Sahib, to recapture the fortress. These arrived and occupied the town and palace on September 23rd. The next day Clive had the daring to issue from his stronghold before any progress had been made in the siege works, and succeeded in inflicting considerable loss upon the enemy in the streets of the town. This exploit, however, nearly cost him his life, and had little practical result, except in so far as it raised the courage of the English garrison, and proportionately damped the ardour of the besiegers.

Rajah Sahib now proceeded to invest the fort with 120 Europeans, 2,000 organized sepoys, 300 cavalry, and 5,000 irregular peons. The circumstances of the memorable siege which ensued are among the most remarkable in the history of our arms in India. But sixty days' provisions remained in the fort, though the garrison had abundance of water. They, however, narrowly escaped losing this, as the fort reservoir possessed a secret passage known to the enemy, which would enable them to drain off its whole supply. This was fortunately discovered and the vent secured.

In spite of the enormous odds against him, Clive never lost heart nor appeared at a loss for expedients to harass the enemy, or to counteract their plans; and, what was more important, he showed that he possessed the invaluable power of inspiring his troops with a portion of his own confidence. Breaches made by day in the ruined old battlements, a mile in circumference, were untiringly repaired during the nights, and the hour in which the garrison must surrender, though appearing daily close at hand, was constantly postponed, until fifty days of the siege

had expired. "During this time," writes Macaulay, "the young captain maintained the defence with a firmness, vigilance, and ability, which would have done honour to the oldest marshal in Europe."

Within the fort had been found an enormous piece of ordnance, discharging a 72 lb. ball, which had been drawn, it was said, during Aurangzíb's expedition by a thousand yoke of oxen all the way from Delhi. This unwieldy monster Clive actually succeeded in erecting upon the highest of the fort towers, and from this position it was for some days fired once each day at the palace of the nabob, while Rajah Sahib and his officers were met for the purpose of holding a council of war. On the fourth day the cannon burst, but fortunately without doing any damage to the besieged, as Clive had taken the precaution of firing it by means of a train. The accident deprived the garrison of their daily diversion, and it emboldened Rajah Sahib to take steps for retaliation. A huge mound was raised, by his orders, at a short distance from the fort walls, which commanded the whole of the interior, and upon it was raised a small but powerful battery. Clive allowed the work to arrive at completion without hindrance, but no sooner were the guns in position, than he opened fire upon them with such success, that within an hour the mound was a heap of ruins, and fifty men who were stationed upon it were all either killed or severely disabled. During the siege attempts had been made both from Madras and Fort Saint David to relieve the garrison, but without success. Now, however, hope of assistance appeared from an unexpected quarter. Some Mahratta cavalry, under a leader named Morari Row, had been hired to assist the cause of Mahommed Ali, but, as long as fortune seemed to favour the opposite side, they had only assisted by remaining neutral. Now that the news of Clive's gallant defence reached them, they announced their readiness to come to his assistance. Rajah Sahib, aware of the threatened danger, saw that it was necessary to hurry matters to a conclusion. He therefore summoned Clive to surrender, but his message was replied to by a refusal couched in the most contemptuous terms. The offer of a present of money was indignantly rejected, and the threat that an immediate assault would be the result of continued resistance, was met by the remark that Clive could not persuade himself that Rajah Sahib would be guilty of so great an indiscretion as to storm the fort with no better soldiers than the cowardly rabble which composed his army.

Seeing that there was no prospect of a surrender, Rajah Sahib resolved to adventure an assault, which took place on November 14th. The result is thus described by Macaulay :—

"The day was well fitted for a bold military enterprise; it was the great Mahommedan festival, the Moharrum, which is sacred to the memory of Hossein, the son of Ali. Clive had received secret intelligence of the design; had made his plans, and, exhausted by fatigue, had thrown himself on his bed. He was awakened by the alarm, and was instantly at his post. The enemy advanced, driving before them elephants whose foreheads were armed

with iron plates. It was expected that the gates would yield to the shock of these living battering rams. But the huge beasts no sooner felt the English musket balls, than they turned round and rushed furiously away, trampling on the multitude which had urged them forward. A raft was launched on the water, which filled one part of the ditch. Clive perceiving that the gunners at that post did not understand their business, took the management of a piece of artillery himself, and cleared the raft in a few minutes. Where the moat was dry the assailants mounted with great boldness, but they were received with a fire so heavy and so well directed, that it soon quelled the courage even of fanaticism and of intoxication. The rear ranks of the English kept the front ranks supplied with a constant succession of loaded muskets, and every shot told upon the living mass below. After three desperate assaults the besiegers returned behind the ditch.

"The struggle lasted about an hour. Four hundred of the assailants fell. The garrison lost only five or six men. The besieged passed an anxious night looking for a renewal of the attack. But when day broke the enemy were no more to be seen. They had retired, leaving to the English several guns and a large quantity of ammunition."

Thus ended the siege. The story told by Macaulay of the sepoys relinquishing their rations of rice, and requesting to be allowed to subsist upon the unsubstantial diet of conjee-water, is romantic, but has been found to rest upon no foundation of fact.

News of the gallant defence of Arcot was received in Madras with unbounded satisfaction, and Clive became the hero of the day. Reinforcements were sent at once to enable him to follow up his successes, and Timiri, a fort nine miles from Arcot, having been summoned, submitted without a struggle. Thence the army marched in pursuit of Rajah Sahib's discomfited host towards Arni, and an engagement took place close to the Padavéd river, in which the Mahrattas, whose co-operation had been secured by the brave defence of Arcot, behaved with distinguished gallantry. The enemy were gradually forced to retreat until night put an end to the affair, but the morning revealed the fact that Rajah Sahib and his army had fled in great disorder to Gingee, leaving, much to the delight of the Mahrattas, a large quantity of stores behind them and a lakh of rupees in cash. The fortress of Arni however remained unvanquished, and its Killadar declined to surrender to a general who had no battering train; so Clive was obliged to content himself with the surrender of an elephant, some horses and baggage, and a promise that the governor would swear fealty to Mahommed Ali.

The army now returned to Madras, and the neighbourhood thus left unprotected fell a prey to Rajah Sahib, who employed the opportunity in ravaging it up to Conjeeveram. This led to a resolution at Madras that Clive should once more take the field against the enemy, who were with some difficulty discovered at Kávéripák, in the Taluk of Wálájá Though the English came upon them unexpectedly, and, being taken by surprise, were at first obliged to fall back, they soon rallied, and a

desultory conflict was carried on in the moonlight. The enemy had the advantage in artillery, and Clive saw that his only chance of success lay in capturing the guns. A detachment was therefore marched by a circuitous route, and succeeded in making its way unperceived to the enemy's rear. A few rounds from this position soon brought matters to a conclusion, and the soldiers of Rajah Sahib, finding themselves between two fires, ran from their guns. Several were made prisoners, and among them sixty-six Europeans. Nine field pieces with three mortars were left upon the field, and the neighbouring fort of Kávéripák was abandoned.

Having effectually dispersed Rajah Sahib's army, Clive started to relieve the garrison of Trichinopoly, and on his way passed near Ambúr, where the eventful battle of 1749 was fought. Here he found the commencement of a town, projected by the French commander, and intended by him to be named after himself, Dupleix-Futteabád, "the city of Dupleix' victory." Clive also learned that a column was under preparation bearing a pompous inscription in Hindustani, Persian, and Tamil, while medals commemorative of the late victory had already been buried beneath the intended site of the column. No vestiges of the unfinished town remain, as the English army halted for a few days on the spot and was employed in the pleasing labour of removing all traces of it. From Ambúr they marched unopposed to Trichinopoly, where fortune continued to favour our arms. Chanda Sahib surrendered, and at the instigation of Mahommed Ali was treacherously murdered.

During Clive's absence in the south the conduct of military affairs in the neighbourhood of Madras had been entrusted to an officer named Lawrence. One of his first acts was to make a demonstration against Wandiwash, which was still held by Tuckia Sahib, who had married one of the daughters of the late Sufder Ali. Under the protection of this officer resided his mother-in-law, the widow of the deceased nabob, with her posthumous son. Although Major Lawrence's forces were amply sufficient to effect the reduction of the fort, Mahommed Ali, who accompanied the army, preferred the idea of replenishing his coffers with the ransom of the fortress to carrying away captive the widow and her son, though they might possibly prove future rivals. Proposals were therefore made to Tuckia Sahib, which he declared himself willing to accept. All seemed to have been amicably arranged, when one of the fort guns was accidentally fired into the English camp. The troops were only too glad of an opportunity of sacking the town. They therefore broke into one of the three pettahs which lay without the fort, supported by a small body of Europeans. Tuckia Sahib concluded that the nabob's overtures had been simply made to throw him off his guard, and a heavy fire was therefore opened upon, and returned by, the troops in the pettah. The contest was continued throughout the night, but in the morning an opportunity was found of explaining the mistake. The nabob's troops were called off, and the army left Wandiwash with the addition of three lakhs to its treasure chests.

Meanwhile the funds at the disposal of Dupleix began to fail, and he resolved to throw over Rajah Sahib for the more pecunious governor of Vellore. To him therefore he offered the title of nabob, and after some hesitation Mortiz Ali accepted it. Before starting for Pondicherry he proposed to win back Arcot for his patron, and had arranged with the French captives in that fort a plan for their rising against the garrison, when the plot was happily discovered, and the danger averted by the removal of the prisoners to more secure quarters.

Mortiz Ali's stay at Pondicherry was however short, for he was acute enough to perceive that he was being merely used as a tool for the advancement of the French interests. He therefore took an early opportunity of escaping back to his fort, where he resolved to watch the progress of affairs.

After the dispersion of Rajah Sahib's army at Kávéripák, several portions of the Carnatic had been much harassed by the depredations of some of the adventurers who had joined that prince's standard, and who upon his overthrow had been left without employment.

Of these the most audacious was one Mahommed Kamúl, who at first confined his operations to the neighbourhood of Nellore For a while he was allowed to pillage without hindrance, as the English had more important foes in the south ; but when, in 1753, he marched to Tirupati, the authorities at Madras became alarmed at the threatened loss of the large revenues of that temple, which their nabob had assigned to them. A small force was without delay sent to protect the renter, but it was surrounded by Mahommed Kamúl's troops upon the plain of Tirupati and driven back with great loss. On the following day reinforcements arrived, and the issue of a battle was once more tried. At first fortune appeared again to have declared against the English, for the enemy held their ground, and the European officer in command was killed. But fortunately the elephant was killed which carried Mahommed Kamúl, and he was captured. His troops forsook him, and in consideration of the atrocities he had committed he was executed on the spot.

The war which had begun in Europe in 1744 had been concluded by the treaty of Aix-la-Chapelle, but hostilities had continued in India. The Court of Directors, wearied at the continued expense of the contest, now expostulated with the French Ministry, who deputed a M. Godeheu to arrange matters. He arrived at Pondicherry in 1754, and a treaty was soon concluded by which Mahommed Ali was acknowledged Nabob of the Carnatic, and it was stipulated that neither party should again interfere in the affairs of Native States. It is difficult to justify the conduct of the two parties to this treaty almost immediately after its formal ratification. The English lent their troops to the nabob for the purpose of coercing his tributaries and levying contributions ; while the French fitted out an expedition against Terriore. Such flagrant violations of the peace were, however, passed over in silence as a new continental war between the two countries broke out soon after.

Among the other tributaries against whom the assistance of the

English was obtained, were those known as the Western Poligars, namely, the Zemindars of Venkatagiri, Kálahastri, and Kárvétnagar, the estates of the two latter lying in this district. They all submitted without a struggle, Kálahastri paying a lakh, while Kárvétnagar contributed 80,000 rupees. From the Northern Páliems the expedition proceeded to Vellore, but Mortiz Ali at once sent off a complaint to the French, which produced a message from Pondicherry announcing that any proceedings against Vellore by English troops would be considered a violation of the peace. The message was speedily followed by a French force, with which the nabob had no mind to try conclusions. Vellore was therefore abandoned after Rupees 20,000 had been reluctantly parted with by its parsimonious governor.

In 1757 the Carnatic was doomed once moré to suffer from one of the periodical Mahratta inroads. A large army was sent by the Péshwa, under the command of a general named Balavant Row, who crossed the plateau of Mysore and invested the fortress of Cadapanattam which stands at the head of the Thallapulla ghaut, in the Taluk of Palmanér. While the main body remained before this fortress a detachment was sent on to the nabob at Arcot, with a peremptory demand for the payment of the arrears of revenue due to the Mahrattas. Mahommed Ali temporised, and meanwhile Cadapanattam surrendered after a siege of nearly three weeks. The Mahratta army then descended the ghauts, and parties scoured the country about the Vaniambádi valley, while Vellore and Ambúr were invested by portions of the main body.

The nabob now saw that he must come to terms, and agreed to pay two lakhs in cash, promising a further sum of two and a half lakhs so soon as he should be able to collect the sum from his feudatories. But as cash was not forthcoming from his own treasuries, he was obliged to apply to the Government of Madras for a loan, and his application was complied with, though reluctantly.

When the war of 1756 broke out between the French and English nations in Europe, the Government of the former country resolved to make a grand attempt to regain their influence in the East, and to secure for themselves the exclusive commerce of the country. With this object a formidable armament was equipped, and M. Bussy was superseded in the conduct of affairs by Count Lally, a brilliant but headstrong officer. Bussy had by this time arrived at the summit of his success, and his distinguished talents had not merited the slight put upon him by the French Ministry. Had he been continued in his command it is not improbable that the results of the war might have been far different from what they proved.

Count Lally arrived at Pondicherry on May 1st, 1758, and at once committed a fatal error in recalling Bussy from Hyderabad, where he had just succeeded in establishing his influence within the territories of the Nizam. He with reluctance obeyed the orders of his chief, and marched southwards with all the troops under his command.

Wandiwash had been constituted the head-quarters of the French in this portion of the Carnatic, and from thence several expeditions had been made against the nabob's forts in the neighbourhood. One of these, that of Chétpat, bravely resisted an attempt, made in the early part of 1757 to force it to capitulate. Its Killadar, Nizar Mahommed, after enduring a long siege was reduced to great straits, but at length reinforcements were thrown into the fort, and the enemy abandoned their designs upon the place as hopeless. They spent the interval in overrunning and plundering the country as far as Arcot, until in September they judged that Chétpat, now deserted by the reinforcements from Madras, might again be invested. The brave old Killadar, Nizar Mahommed, prepared to make as brave a resistance as in the early part of the year, and meanwhile sent word to Madras that assistance was urgently needed. But this time he waited for them in vain. Mahommed Ali had long been offended at the independent spirit manifested by his subordinate, and had never forgiven him for having obtained his appointment directly from the Nizam. He was therefore only too glad to see Nizar Mahommed in difficulties, and resolved to prevent the English from going to his rescue. To effect his purpose he insinuated to the authorities at Madras that the Killadar had been bought over by the enemy, and by some means succeeded in persuading the Government that such was the case. The much needed succour was therefore withheld until the gallant defence of the place placed the fidelity of its commander beyond suspicion.

The French had carried the pettah below the fort with ease, and had erected three batteries within it; but Nizar Mahommed led a gallant sally against the principal one, drove off the gunners, dismounted the cannon, and carried off what ammunition he found stored on the spot. Hearing of this success reinforcements were sent off in hot haste to save the fort, but they arrived too late. On October 13th, though a practicable breach had been made, the garrison refused to surrender. On the following night a party of the French concealed themselves close to the fort gateway, and when in the morning an assault was made at the point where the breach had been effected, the troops in ambush escaladed the wall and gained the ramparts with but little opposition, as the main portion of the garrison was absent defending the breach. Having thus gained an entrance into the fort the escalading party attacked their enemy on their flank, and, in the confusion which resulted from the surprise, the besiegers poured in through the gap. Nizar Mahommed was shot while heroically attempting to force the assailants back, and almost the whole of his garrison were put to the sword. The ladies of his family barricaded the doors of their dwelling, but fire was set to it, the women were dragged out, and, it is said, shamefully outraged.

The sad fate of their ally naturally caused great regret at the presidency, and it was anticipated that operations would be commenced

against other fortresses in the neighbourhood. Fortunately the French commander had received instructions to confine his movements to the vicinity of Pondicherry, and on no account to pass the Pálár, as the rainy season was approaching. After garrisoning Chétpat therefore the troops moved south.

The reprieve was however a short one, for after the rains were over the enemy advanced to Timiri, which surrendered without a struggle; and within a few days Arcot was invested. The defences of this place were weak, and its venal commander concluded it to be his wisest policy to accept a sum of money and betray his trust. Without firing a shot he agreed therefore, for a consideration, to admit the French forces.

Count Lally was not present at the surrender, but hearing of it he determined to make the most of the acquisition of the nabob's capital. Hurrying up with his division he entered the fort amid salvoes of artillery and the acclamations of his troops.

The submission of the Killadar of Arcot led the garrison of Kávéripák to evacuate that fort, and the French, after quietly taking possession, advanced to Chingleput.

The object of Lally in making this advance was well known to be the reduction of Madras itself. Bussy, who had recently joined him from Hyderabad, was strongly opposed to the scheme, which also met with little favour in the eyes of the Government of Pondicherry. Lally was strongly urged to wait a while at Arcot to obtain supplies and consolidate his forces, but he obstinately rejected all advice, and on December 12th, 1758, appeared before the presidency with 2,700 Europeans, 400 European cavalry, and 4,000 sepoys. After a two months' siege a practicable breach was effected, but the timely arrival of an English fleet in the Madras roads caused a panic in the besieging army, and Lally was mortified by having to beat a hasty retreat.

While the fate of Madras lay still in doubt, the neighbouring chiefs had been watching the contest with great eagerness. A large body of Mahrattas, who had been engaged in their favourite pastime of plunder in the district of Cuddapah, had been attracted into this district by the intelligence of the struggle. Passing through the Pass of Kallúr, they established themselves in the Dámalcheruvu valley, no doubt much to the annoyance of the inhabitants of that neighbourhood. No sooner was the French army reported to be in retreat than the Mahratta commander, Gopál Row, had the assurance to demand a sum of twelve lakhs from the Madras Government, on the pretext of his having, at great inconvenience to himself, held his troops in readiness to march to the succour of the presidency when they should be in need of it. But though he made these representations to the English, he was not deterred from sending off another detachment after the French, offering his assistance in resuming the siege of the town. Both sides however declined his proposals, the Madras Government bidding him prove his

sincerity by pursuing the retreating army and cutting it to pieces. Gopál Row, disappointed of his expectations, retired to relieve his feelings by the plunder of the Tirupati pagoda.

For some time after the failure of the siege of Madras nothing noteworthy occurred either on the side of the French or the English. The former were dispirited by their ill success, and the English leader, Major Brereton, displayed no great aptitude. With more vigour and promptness matters might have been brought to a successful conclusion, but Major Brereton failed to take advantage of his opportunity, and Colonel Coote was summoned to take command of the army.

Before Colonel Coote should arrive Major Brereton was anxious, if possible, to achieve at least one success. He therefore marched to attack Wandiwash, which still continued under the command of Tuckia Sahib. On September 28th, 1759, he arrived before the fort, and hearing that French reinforcements were on the move, determined on making an assault upon the following night. It began at 2 o'clock in the morning, and the southern pettah was carried successfully. But there were some 1,300 Europeans within the fort, besides native troops, and these, making a determined sally, drove the English out of the position which they had gained, and forced them to abandon their designs. Though this attempt "was much more hardy than judicious," says Orme, "the great gallantry, and the inferior number of the body which sustained the greatest part of the loss, rather increased than diminished the confidence of the army."

Major Brereton now withdrew his forces, but the French, though thus relieved from the danger of an attack by an English army, were menaced by another and a hardly less perilous danger. This was a mutiny among the European troops composing the garrison of Wandiwash. Disaffection had some time previously been exhibited by the troops at Chétpat, but the spirit of insubordination appeared to have subsided. The causes which gave rise to the discontent had however not been removed. The troops were twelve months in arrears of pay, and subject to the greatest distress from want of both provisions and clothing. Symptoms of discontent had for some time been exhibited, and on October 16th the whole body of the European troops marched under arms, carrying their artillery with them, and encamped at the base of the rocky hill which stands at a short distance north of the fort. There they chose out officers from among themselves, and continued, with the utmost regularity, the daily routine of military life. All expostulations from their officers were in vain, and the Council at Pondicherry was at last obliged to despatch Viscount Fumel, with a promise of six months' pay and a general pardon. These terms were accepted, and the army regarrisoned the citadel.

In November Colonel Coote arrived and assumed command of the Madras army, into the actions of which he infused new vigour. He promptly resolved upon effecting the reduction of Wandiwash. Major

Brereton, now second in command, was sent by the direct route, while Coote, to divert the attention of the enemy, marched by way of Arcot. On his way he was opposed by a division of the French army at Chakramallúr, but repelled the attack. The enemy's troops outside the fort of Arcot also retreated and hurried back to Chétpat.

Colonel Coote arrived at Wandiwash on November 28th, and found that Major Brereton had already got into position a battery against the south-west angle of the fort. A second battery was soon completed, and both opened fire on the 29th. Upon the following day the Killadar sued for terms. These were offered, but no reply having been received within the stipulated time, the order for a general assault was given. It was unopposed, and Wandiwash passed to the English without the loss of a single life. The Killadar was removed from his office, and was sent a prisoner to Kylása Drúg, a hill fort six miles distant from Vellore.[1]

After the mutiny at Wandiwash, Lally had removed a large portion of his army to the south. It was in consequence of this error that Coote had been able to capture Wandiwash with so little difficulty, and Lally, now appreciating his mistake, recalled almost the whole of the French army from the neighbourhood of Trichinopoly, whither he had sent it. He also secured at a high price the services of a large body of Mahrattas, who had been waiting at Cadapanattam to see which side would offer the more liberal terms. With these he advanced, about the middle of January 1760, and laid siege to Wandiwash. Bussy entirely disapproved of the scheme, and did his utmost to dissuade his chief from it, but the misunderstandings between the two commanders had increased of late, and Bussy's wise suggestions were rejected. From the very commencement of his Indian career Lally had systematically treated the advice of his colleague with contempt, and had in consequence more than once fallen into the commission of very fatal errors. Not the least of these was the injudicious attempt to recover Wandiwash.

The pettahs having been taken, batteries were raised against the fort. Coote received daily intelligence of the progress of affairs, but resolved to wait, and, when he did risk a battle, to have the choice of attacking the party engaged in the siege, or the army which covered them on the plain. On January 20th news was received that the main rampart had been breached, and Coote now judged it time to advance. At dawn of the next day he was within sight of the fort, and, after a reconnaisance, decided upon attacking the French army camped on the plain to the east. Marching along the eastern side of the hill of Wandiwash, which stands two miles north of the fort, he skirted its southern base, intending to take up a highly advantageous position between the hill and fort. Lally appears at first not to have appreciated the object of Coote's manœuvre, for little opposition was offered to the advance of

[1] Or possibly Ambúr drúg, which is also called Kylása.

the English force, and the few attacks of the Mahratta and French cavalry were easily repelled. When it was too late to defeat Coote's scheme the movement had been accomplished; the English line was marching with one flank resting upon the rocky ground at the base of the hill, while the other extended as far as the paddy-fields which lie north of the fort, and was further protected by the fire from the fort guns. In this position Coote had the power of communicating at will with the garrison, and the choice of attacking the French camp, their batteries, or their trenches. He had already decided on attacking the camp.

Lally hastened to retrieve his error, and the French beat to arms. They mustered 2,250 European infantry, cavalry, and artillery, with 1,300 sepoys and 3,000 Mahratta horse. Coote's army numbered about 1,800 European infantry, with 80 English troopers, and 2,100 sepoys, with 1,250 Native cavalry. As soon as the French army was observed marching out of the camp the English halted, faced towards the enemy, and advanced to meet them. The battle was commenced by a cavalry charge, led by Count Lally in person. The native portion of Coote's horse threw themselves into confusion in wheeling to receive the charge, and being thus disordered broke away, and left their 80 European comrades to repel the attack alone. They would have fared but ill had it not been for the promptitude of an artillery officer, who, perceiving the danger, reserved the fire of his two guns until the enemy were directly opposite to him, when he poured into their squadrons several rounds in quick succession. They were instantly thrown into utter confusion, and within a minute the whole body retreated, pursued by the English troopers and those few Indian horse who, seeing the result of the charge, had gathered up sufficient courage to take part in the pursuit.

This opening attack of the French having proved unsuccessful, a cannonade was commenced on both sides, but while that of the French was so ill-directed as to have no effect, the fire from the English guns greatly harassed the French line. Perceiving the disadvantage under which his troops were fighting, Lally determined to take them to close quarters. A fusilade commenced, while the armies were still at long range, and two or three shots struck Colonel Coote without disabling him.

The French attack was led by the Regiment of Lorraine, consisting of about 400 Europeans. Coote ordered his men to withhold their fire until the enemy were within effective distance. They came on in column, twelve abreast, and were met at fifty yards distance with a deadly volley which brought down several but did not check the advance. In a few seconds both sides were struggling in a hand to hand encounter. The attacking column by its sheer weight bore down those of the English who were directly opposed to them, but the rest of the line instantly wheeled in upon their flanks, and attacked them with the utmost fury. In hardly more than a minute the French column was

utterly demoralised, and fled in disorder, leaving the ground strewn with the dead and dying.

The English line was now formed into order, and was preparing to follow up its success, when an accident occurred which added to the confusion in the French army. Lally had made use of the bund of the Wandiwash tank as an entrenchment from behind which his field pieces delivered their fire. A shot from one of the English guns struck a tumbril of ammunition stationed here, and the explosion which resulted, besides killing or mortally wounding no less than eighty men, terrified the whole of the troops stationed in the dry bed of the tank, and caused them to flee precipitately towards their tents. Coote, observing the opportunity, ordered Major Brereton, second in command, to advance without delay to capture the bund. Bussy had rallied a few of the fugitives, and with these, as well as two platoons of Europeans, who had maintained their order, he awaited the attack. Major Brereton advanced rapidly to the western end of the bund, where his regiment made an impetuous charge. Bussy delivered a heavy volley at close quarters, under which Major Brereton fell mortally wounded, but the tank was carried and all the cannon captured.

Meanwhile Coote was carrying on the conflict on the plain, and the French, having no artillery with which to return the English fire, soon showed signs of disorder. Bussy, who had been driven out of the tank, had taken command of them, and placing himself at the head of the wavering line, called upon them to charge with the bayonet. They answered to his call, and advanced for a short distance, but their leader's horse being shot under him, and he having to dismount, they grew disheartened, and shrunk back galled by the heavy fire from their foes. The English line now advanced, and the French, without waiting to receive their charge, fled precipitately, leaving Bussy a prisoner in the hands of the English. He was after the battle liberated in consideration of his generous conduct to British captives in the Northern Circars.

The whole of the enemy's forces were now in retreat. They were only saved from complete destruction by the intervention of their cavalry. These had been retreating before the English horse while the battle continued, but had avoided an encounter with their pursuers by means of adroit manœuvring. They now formed into squadrons and covered the approach to the camp, into which fugitives were constantly pouring. Our native troopers were unwilling to venture on a charge, and the 80 Europeans were too few to do so alone. They therefore held aloof, while the French regiments formed into some degree of order, set fire to their tents, and, taking with them three pieces of artillery left in the camp, retreated under the protection of their cavalry. They were pursued for five miles, but Coote's native horse proved so utterly wanting in spirit that nothing was achieved.

The success was, however, complete. Twenty-four cannon with eleven tumbrils of ammunition were captured, as well as the whole of

the camp equipage of the defeated army. Two hundred Europeans were found dead upon the field, while almost as many were taken prisoners. The loss among the native troops on both sides was inconsiderable, as they had really taken no part in the engagement. Success was won entirely by the exertions of the Europeans, and the "Commandant of the sepoys," says Orme, "complimenting Colonel Coote on the victory, thanked him for the *sight* of such a battle as they had never seen."

From Wandiwash Coote now pressed on with his accustomed energy to Chétpat, and opened fire upon the fort on the 29th. Within a few hours the commandant surrendered, and nine more guns with a considerable amount of ammunition and several prisoners fell to the English. Three days later Timiri was retaken, and operations were commenced against Arcot with such success that within a week the garrison offered to surrender if allowed all the honours of war. Coote having the decided advantage, declined to grant such terms, and on the subsequent day the fort was unconditionally given up. Mortiz Ali, perceiving how the tide had turned in favour of the English, submitted without a struggle, and the Jaghiredar of Arni, who had as far as possible remained neutral during recent events, now declared for the nabob. By the close of the year Coote had regained every fortress in this portion of the Carnatic with the exception of Pondicherry and Gingee. The former fell in January of the following year, and Gingee yielded after a short siege in April 1762.

Thus ended the contest between the French and English, which had continued almost without interruption for the last fifteen years. It left the French without a settlement in the Carnatic, and completely destroyed their hopes of establishing an empire in the country.

During this time Tirupati had been the scene of several struggles for possession of the very considerable income derived from the offerings made at its celebrated shrine. Unlike other similar institutions in the country, the revenues of Tirupati had for very many years, if not always, been paid over to the ruler of the districts within which it is situated. The Nabobs of the Carnatic, like their predecessors, had yearly received nearly two lakhs from the place, and lately this valuable source of income had been assigned to the English in consideration of the assistance rendered by them in establishing the nabob's power in the Carnatic.

In 1753 the temple had been menaced by the freebooter Mahommed Kamúl from Nellore, whose defeat and execution have already been narrated. In 1756 it was once more threatened, and the danger was again from the direction of Nellore. A brother of the nabob named Nazeabulla had rebelled against the authority of Mahommed Ali, and, retiring to the north, amused himself and his followers by frequent raids upon the territories of the three western Zemindars. These diversions, as they did not seriously affect the interests of the Company,

were regarded with indifference at Madras; but in August 1757 Nazeabulla invested the nabob's fort of Sálava.[1] His movements were reported, and no doubt was entertained that his object was the acquisition of the offerings which would be received at the approaching feast. During this festival, known as the Bramha-uthsavam, a very large proportion of the revenues of each year are realized from the crowds of pilgrims who attend during the few days it continues. To prevent the appropriation of these by Nazeabulla a detachment was sent from Madras, which occupied the town below the sacred hills. Nazeabulla's designs being thus frustrated, he retired from the neighbourhood, but displayed his resentment by stopping and turning back as many pilgrims as he met, so that the income of the temple for that year was seriously diminished.

In 1758 danger again threatened the holy place from another brother of the nabob, named Abdul Waháb. He had originally been appointed to the killadarship of Arcot, but during the siege of Chétpat, suspicions, probably groundless, were excited in the mind of Mahommed Ali against him and his mother. Fearing the result of this misunderstanding, the mother and son fled to the small fort of Chittoor, which belonged to the former. Though the nabob attempted to convince his brother that all suspicions as to his fidelity had been removed, the assurances were not believed, and Abdul Waháb continued at Chittoor, maintaining himself and a small body of followers by collecting as much as he could of the peshcush due by the Chittoor Poligars.

In 1758 he resolved on trying his fortune against the wealthy pagoda. Raising a considerable force he threatened the lower town, but was deterred from making any decided attempt to plunder the temple by rumours of the advance of an English force. He therefore retired, and seized possession of the fort of Chandragiri, where he awaited a more favourable opportunity.

When Bussy soon after this returned from Hyderabad to effect a junction with Lally before his advance against Madras, he halted at Tirupati, and seizing the person of the Company's renter, intimidated him into resigning to him the revenues of the temple. Nazeabulla from Nellore, and Abdul Waháb from Chandragiri, here joined him, and accompanied his army to the south. The latter, however, had only allied himself with the French under the impression that he would obtain the grant of the Tirupati revenues. Being disappointed in this expectation he left the army, and once more took up his residence in the fort of Chandragiri.

In 1759 another band of adventurers appeared upon the scene. These were the Mahrattas under Gopál Row, who encamped at Dámalcheruvu during the progress of the siege of Madras. When both the French

---

[1] This may be Márkarázudrúg, or Akásarázukóta near Náráyanavanam, but perhaps more probably the latter.

and the English declined to have anything to say to him after that siege was raised, Gopál Row marched to Tirupati, ascended the hill, and took possession of the pagoda in March, hoping to realize the income which would be received during the festival in April. Before that feast, however, the main portion of his force was recalled by Báláji Row, and the small detachment, which was left under the command of one Naráyanasástri, was easily dispossessed by Abdul Waháb from Chandragiri. The latter was unwilling to risk the chance of being chastised by the English. He therefore reported his success to the Madras Government, and submitted a humble request that he might be allowed to farm the revenues. His prayer was rejected, and the existing renter was confirmed.

Naráyanasástri had only returned to the páliem of Karkambádi on the east of the Tirupati range. Having obtained the assistance of the Poligar, he in July ascended the hills and reoccupied the pagoda. A force of 300 sepoys and 15 Europeans was sent to dislodge him, but it was discovered that only 80 out of the whole number were privileged to ascend the hill, which is only accessible to caste Hindus. This handful was, however, sent up to oust the adventurers, and a furious contest took place, in which numbers were killed, both within and without the sacred precincts of the temple. In the end the sepoys were driven back, and application for reinforcements was sent to Madras. When these arrived it was found that the previous error had been repeated, and that the majority of those composing the reinforcement were either Mussulmans, or other classes not entitled to ascend the hill. Not wishing therefore to venture upon a second attempt upon the temple, Major Calliaud, who commanded the English forces, decided on creating a diversion by attacking the stronghold of the Karkambádi Poligar. The village of Karkambádi was burned, and the Poligar himself killed, in the engagement which took place. This damped the courage of the Mahrattas and their allies, and an attack upon the pagoda on the succeeding day, though the defenders doubled the assailants in number, was entirely successful. Naráyanasástri retreated with the remnant of his force, and the renter was reinstated. A small body of English troops was left to protect him for a time. These were so much annoyed by the Poligar's peons, that a raid into the jungles of Karkambádi was resolved upon. It proved disastrous, as the English officer in command was killed, and the sepoys were forced to retire to Tirupati.

The close of the war between the French and English left Mahommed Ali established as Nabob of the Carnatic without a rival. But this result had been attained almost wholly by the exertions of his English allies, and to recoup themselves for the heavy expenses which they had incurred, the Madras Government demanded from the nabob a contribution of fifty lakhs of rupees. "But the Carnatic," says Marshman, "had been without any settled government for twenty

years. Every invader had desolated its districts, and the Poligars paid no revenue but at the sword's point. The country was, moreover, now in the hands of a court at once wasteful and neglectful, which had been subsisting for years on loans raised on exorbitant terms at Madras, which impaired the strength of those who borrowed the money and the morals of those who lent it."

Under these circumstances the nabob proposed that the Madras Government should assist him in enforcing the payment of subsidies from his wealthy tributaries at Vellore, Tanjore, and Madura. In accordance with his suggestion an English contingent was sent to Vellore, where Mortiz Ali had made preparations to resist the demand. The strength of the fort was such that for three months it withstood the attempts of the combined armies to reduce it, but Mortiz Ali was at length obliged to submit, and reluctantly parted with a large sum of money. The effect of negotiations was tried with the Rajah of Tanjore, who finally consented to pay twenty-two lakhs in four instalments, and four lakhs a year as tribute.

But though these sums were paid into the Madras treasury and placed to the credit of the nabob's account with the Company, a large balance still remained outstanding against him, and the Company found themselves saddled with the expensive duty of protecting their helpless ally for an indefinite time in the future. They therefore demanded that the revenues of certain of his districts should be assigned to them, and that the proceeds of these, after first liquidating the nabob's private debts, should be devoted to clearing off the balance standing in the Company's accounts. The nabob necessarily consented, and assigned districts yielding annually about sixteen lakhs of rupees. The necessary sunnud for these was signed on October 16th, 1763, and a firman from the emperor was shortly afterwards sought for from Delhi and obtained.

In 1763 the war in Europe was terminated by the treaty of Paris. This recognized Mahommed Ali as Nabob of the Carnatic, and Salabat Jung as Subadar of the Deckan. But the latter had been supplanted and confined by his brother Nizam Ali as long ago as 1761. Nizam Ali naturally became alarmed at the terms of the European treaty, and promptly caused his captive brother to be assassinated, while he prepared to invade the Carnatic. His progress was marked by the devastation of the country, and the plunder and torture of its inhabitants. The nabob at once called upon the Government of Madras to fulfil the terms of their engagement with him, and a strong force was sent forward, under the command of Captain Campbell, to oppose the Nizam's army. They came upon the invaders on the plain of Tirupati late one evening, and were prepared to try conclusions with them next morning. But the Nizam had for some time been straitened for want of provisions and water for his enormous army, and on the morning succeeding the day on which the two armies had arrived within

view of one another, Captain Campbell looked in vain for any signs of the enemy whom he expected to engage in battle. He discovered that the whole host had silently decamped in the darkness of the night, and had already passed Kálahastri in their precipitate flight towards Nellore. One consequence of this invasion was that Mahommed Ali applied, through Clive, to the emperor for a firman which rendered him independent of the Government of Hyderabad. The document which conferred this authority decorated the nabob with the titles of Wálájá and Anwár ul Hind.

In 1758 the Nizam had temporarily ceded to the Madras Government the districts known as the Northern Circars, but had persistently refused to grant them permanently though frequently desired to do so. In 1765 Lord Clive, during his second administration, settled the matter by obtaining from the emperor a grant of the districts: and the Nizam, hearing of this arrangement, prepared to retaliate by invading the Carnatic.

The Madras Government, alarmed at the prospect of a fresh war under the straitened circumstances to which they were reduced, resolved upon coming to terms, and despatched Major Calliaud to conduct negotiations. The result was "the disastrous and humiliating treaty of November 12th, 1766, by which the Madras authorities agreed to hold the Northern Circars, which had been conferred upon them by the paramount power in India, as a tributary tenure under the Nizam. * * * * But what was still more objectionable, the President involved the Company in the intricate web of Deckan politics, by engaging to furnish the Nizam with two battalions of infantry and two guns, to settle, in every thing that was right and proper, the affairs of His Highness' Government, well knowing that the first requisition for the troops would be to assist in attacking Hyder Ali, who had recently usurped the Mysore throne, and against whom a confederacy had been formed of the Mahrattas and the Nizam."—*Marshman.*

Mysore was one of those provinces which had sprung up after the dissolution of the Vijianagar kingdom. After reigning for two centuries the Hindu line of princes had become effete, and their authority was usurped by a prime minister named Nanjeráj. Under his auspices the celebrated Hyder Ali first rose into distinction.

He was born in 1702, the son of a petty officer, and began his career with the command of a small body of horse and foot. From this he was shortly promoted to the charge of the province of Dindigul, where, by consummate dissimulation and indiscriminate plunder, he gradually increased the forces under his command and paved the way for supplanting the supplanter of the Mysore ráj.

An inroad of the Mahrattas, which reduced the minister to the greatest straits, afforded Hyder his first opportunity. He came forward to the assistance of Nanjeráj with the money required to meet the Mahratta demand, and received as an acknowledgment extensive

jaghires. By gradually increasing the obligations under which the minister lay, Hyder managed in time to acquire nearly half of the dominions of the Mysore ráj. But at length the jealousy of his patron was awakened, and an army was despatched which totally defeated Hyder. He, however, lost none of his self-possession, but cunningly throwing his pursuer off his guard, raised another army with which he presented himself before the Mysore capital and demanded payment of his debts. Payment was impossible, and the rajah, yielding to necessity, resigned his authority to Hyder on condition of receiving for himself and his minister liberal assignments from the revenues of the province.

It was in 1761 that Hyder assumed the supreme authority in Mysore. His rising power led the Mahrattas to send an expedition against him in 1765. He was defeated and forced to cede a large extent of territory, besides paying a heavy indemnity. Within a year he however proved that his resources were very far from being destroyed, for he extended his territory by extensive acquisitions upon the Western Coast, and thus led the Nizam and Mahrattas to form the confederacy referred to, for the purpose of effectually humbling his pride. The English were invited to assist in crushing the man, who was with truth represented to be the common enemy to the peace of Southern India, and they agreed to join the confederacy.

It was arranged that the Nizam with the English should reduce the fort of Bangalore, while the Mahrattas advanced across the Kistna. Early in 1767 the advance was made, but Hyder succeeded in buying off the Mahrattas, and soon after detached the Nizam as well, from the confederacy. Colonel Smith, who commanded the Madras army, had therefore to act alone. He had marched without delay into the Báramahál, but perceiving unmistakable signs of the Nizam's defection, retired towards the frontiers of the Carnatic.

Hyder on advancing and descending the ghauts received a decided check on August 25th at Chengam, in the South Arcot District, and subsequently suffered a further defeat at Tiruvannámalai, but in spite of these reverses he was able to make his way to Vellore and encamp there during the rains. Colonel Smith at the same time withdrew his forces into cantonments at Wandiwash, Conjeeveram, and Trichinopoly.

Hyder allowed his army short rest, and while the English commander remained inactive, with his troops separated by wide intervals, the Mysore army had taken Tiruvettúr and Vaniambádi, and was engaged in investing Ambúrdrúg, a fort of considerable strength, built upon the summit of a rocky hill which is accessible upon only one of its faces. The place was invested on November 10th, and five days later the lower fort was so dismantled that Captain Calvert, the English commander, was obliged to retire to the citadel upon the summit of the rock. His garrison consisted of but one commissioned officer, a serjeant, and 15 European soldiers, with 500 sepoys. The fort had,

during the opening portion of the campaign, been left in the command of its Mahommedan Killadar, Kuchlis Khán, whom Hyder had been in secret treaty with, and had succeeded in persuading to betray the fort. The plot was happily discovered, but only at the critical moment when Calvert was driven out of the lower fort. He promptly committed the traitor, with his principal officers, to confinement in the drúg, and disarming the disaffected troops, employed them in menial work connected with the siege.

The defence of the upper fort was protracted for many days. Repeated surprises were defeated by the vigilance of the garrison, and Hyder in despair determined to try whether the European commandant could not be bought, as the Mahommedan had been. Calvert replied to his message that the bearer of a second proposal of the kind would be hanged in the sight of the whole Mysore army, and Hyder was therefore obliged to continue active operations.

News of the critical condition of Ambúr had by this time reached Colonel Smith, who arrived before the fort on December 7th, causing Hyder to raise the siege and to retire to Kávéripák. Hearing soon after that an expedition from Bombay had been sent against his possessions on the Western Coast, he withdrew his army to that portion of his dominions.

About the same time the Nizam, being threatened by a force sent against his capital from Bengal, and seeing the unexpected turn that affairs had taken, offered to renew his alliance with the English. He was camped at the head of the Kallúr Pass, whither Colonel Smith was persuaded to send an officer to conduct an envoy to Madras. His negotiations led to the execution, in February 1768, of a fresh treaty, if possible more humiliating than that of 1766, for the English, being now masters of the situation, might have dictated their own terms. Instead of doing so they again consented to hold the Northern Circars under the Nizam, and engaged to conquer the Carnatic Bálághát, and to hold it subject to the payment of tribute to the Nizam, and 'chout' to the Mahrattas. The remaining provisions of the treaty were generally confirmatory of those of 1766, but the English contingent was now to assist the Hyderabad army "whenever His Highness should require them."

In accordance with the engagement to conquer the Bálághát, Colonel Smith was ordered to proceed to that province. The advanced body of the army, under Colonel Campbell, ascended the ghaut, and occupied the fort of Venkatagirikóta, from whence a detachment was sent back to open up the Naikenéri Ghaut, and to reduce Peddanaididrúg. Colonel Smith followed with the main army, and, though hampered by the restrictions put upon him by the Madras Government, he achieved the most brilliant successes. Hyder in alarm proposed to cede the Báramahál, and to pay a sum of money, but his offer was rejected and the campaign continued, though with a marked change of

fortune, for Hyder not only recovered all the forts which he had lost, but descending into the Carnatic, ravaged it in all directions.

Being again opposed by Colonel Smith, who had for a while been recalled from his command, Hyder determined not to risk a battle, and sending back the chief portion of his army into Mysore, he himself, with a chosen body of 6,000 horse, hastened by forced marches to Madras, accomplishing the distance of 130 miles within three days and a half. Paralyzed by the suddenness of the movement, the President agreed to Hyder's terms, and concluded a treaty on the basis of a mutual restitution of conquests, and a promise of help in the future. Thus ended the first Mysore War in 1769.

The promise of assistance was soon violated by the Madras Government, for in the succeeding year, when Hyder was again attacked by the Mahrattas, although he sent repeated applications to Madras for aid, the President declined to interfere, and Mysore was left to its fate. The consequence was that Hyder's army was utterly defeated, and he was forced to pay an indemnity to the Mahrattas. Such a disgraceful breach of faith naturally exasperated him, but he was too thoroughly humbled by the results of the campaign to do more than nurse his resentment and resolve on subsequent revenge.

In 1778 war again broke out between England and France, and extended to their possessions in this country. Pondicherry was taken, and the reduction of Máhé, upon the Western Coast, was planned. Hyder, learning of the design, announced to the English Government that any attack upon the place would result in his invading their territories in the Carnatic. In spite of the threat, however, Máhé was reduced, and Hyder resolved on invading the Carnatic. The Mahrattas had also reason to be dissatisfied with their treatment by the English, and suggested that the Mysore army should co-operate with them against the common foe. The suggestion was, of course, eagerly accepted, and extensive preparations began at Seringapatam.

The authorities at Madras appear to have been most unaccountably ignorant of what was in progress in Mysore, for we find the Governor, Sir Thomas Rumbolt, on leaving India at this time, recording his "confidence that there was no likelihood of any troubles on this side of India." The nabob appears, however, to have had an intimation of the alliance, for as early as November 1779 he warned the President of the coalition between Hyder and the Mahrattas; but his warning was disregarded, and the Government continued to dream of peace and safety.

They were rudely awakened by a message from the officer commanding at Vellore, who announced, on June 19th, 1780, that an enormous army had left Seringapatam, and was already arrived at Bangalore. This was followed by tidings from Ambúr, reporting that the enemy had on July 20th descended the ghauts at Chengam, and were actually within the Carnatic.

The unpardonable apathy displayed by the Government now left them without the means of opposing this invasion, which was characterized by unexampled cruelty. Hyder drew a belt of destruction around Madras, from Pulicat in the north to Pondicherry in the south, while round Vellore he described a similar circle with a radius of about a dozen miles. Villages along these lines of desolation were sacked and reduced to ashes, the wretched inhabitants being commanded to migrate at once with their flocks and herds. Those who ventured to linger near their homes were ruthlessly tortured and even mutilated. The miseries of the *Hyder kalábana*, as this invasion is called, are still spoken of by the people of the district.

No step was taken to meet the danger until the smoke of burning villages was clearly visible from St. Thomas' Mount. Then hurried orders were sent to Guntoor, directing Colonel Baillie, in command of a detachment there, to hasten southwards by way of Kálahastri and Tirupati. The Colonel fortunately perceived the danger of such a route, and returned by a course nearer to the sea coast.

Without waiting for the arrival of the detachment from Guntoor, the Commander-in-Chief, Sir Hector Munro, advanced from St. Thomas' Mount to Chingleput, with the intention of raising the siege of Arcot, in which Hyder was engaged. He reached Conjeeveram on August 29th, hoping soon to be joined by Baillie, but the latter was delayed by the unforeseen accident of freshes coming down the Kortalayár. He was kept an impatient prisoner on the northern bank of that river until September 4th, when he effected a passage with 207 Europeans, 2,606 sepoys, and 10 field pieces. Tippu was deputed to intercept the detachment, and an engagement took place at Perambákam, on the northern bank of the river and just beyond the border of this district. In it both sides suffered severely, and while Colonel Baillie reported to the Commander-in-Chief that he could advance no further, Tippu announced to his father that without reinforcements he could make no impression upon the English.

Instead of advancing to unite with Colonel Baillie, Sir Hector Munro still further separated his army by sending a detachment to join him. Fortunately Colonel Floyd, in charge of the reinforcement, succeeded in reaching Baillie's camp on September 9th, and on the same night the two brigades advanced. Hyder was dismayed at the success of the manœuvre. His army was by it placed between two powerful bodies of the enemy, and had the Commander-in-Chief acted with common prudence and energy, the fortunes of the day might have been far different to what they proved. On the contrary, he remained inactive, and Hydér, once convinced that he contemplated no movement, marched to encounter the forces under Baillie.

The engagement began early in the morning of August 18th, at Pullalúr, near Pallúr of the Wálájá Taluk. Colonel Baillie's brigades were completely surrounded and their escape rendered hopeless. "It was

in vain," says Marshman, "that the men performed prodigies of valour, and repeatedly stormed the batteries. The enemy had chosen their position with great skill, and poured in a destructive fire. The European soldiers, though they had sustained thirteen attacks, and were reduced to three hundred, still called out to be led against their assailants; but Baillie refused to sacrifice the lives of these brave men, and held out a flag of truce. They had no sooner laid down their arms, however, than Hyder's men rushed upon them, and would have butchered the whole body if the French officers had not interfered to save them. Of eighty-six officers twenty were killed or wounded, and the whole army, with its stores, baggage and equipments, was totally and irretrievably lost." Cultivators tilling the soil of the battle field even now turn up coins with their ploughs, and it is said that these were, in default of cannon balls, fired from the British guns.

Sir Hector Munro could not, at this time, have been more than a few miles distant from the scene of the battle. Had he advanced to the rescue, the defeat might have been converted into a victory, but he held aloof, and on learning the result of the action, threw the heavier of his guns into the Big Tank of Conjeeveram and retreated upon Madras.

News of the disastrous commencement of the war was speedily sent to Bengal, where Warren Hastings, then Governor-General, declared it to be his opinion that there was "no hope unless Sir Eyre Coote would at this time stand forth, and vindicate in his own person the rights and honour of the British arms." Though feeble in health and advanced in years, this veteran commander accepted the invitation to return to the scene of his early glory, and arrived at Madras on November 5th. He found the arrangements for taking the field so utterly neglected, that he was obliged to postpone active operations until he had at his command a sufficiency of provisions and means of transport to justify the attempt.

Meanwhile Hyder had returned from the neighbourhood of Conjeeveram to resume the siege of Arcot, and on September 19th had again invested the town, which was surrounded by a fortified wall some miles in circuit. After six weeks two practicable breaches were effected, and assaults were directed to be made. One, under the direction of Tippu, was repulsed, but the success of the other dispirited the garrison, and Tippu gained an entrance upon a second attempt. The defenders were thus forced to retire into fort, which had been so heroically defended by Clive in 1752. But the officer now in command had to contend against disaffection among his own men, a danger from which Clive had happily been free. Mahommed Ali's Brahman governor of the soubah, Achenna Pundit, better known as Rajah Beerbur or Rayoji, had been made prisoner in the assault upon the town, and was prevailed upon by Hyder to exert his influence in raising a spirit of disaffection among the garrison. The design succeeded, and the English officers were in consequence obliged to surrender the fort upon favourable terms.

It was as late as January 17th, 1781, before Sir Eyre Coote was able to move, and even then the equipments and supplies of his army were miserably defective. By that time Ambúr had capitulated, and Hyder was occupied in the sieges of Vellore and Wandiwash. The defence of the latter place forms one of the most romantic and honourable episodes in the war, and merits a celebrity greater than it possesses.

At the commencement of the war it had been recognized that no dependence could be placed upon any of the nabob's officers to whom the defence of the Carnatic strongholds had been entrusted. It was accordingly resolved that European officers should be deputed to take charge of all posts of importance, and Lieutenant Flint was selected for the fort of Wandiwash. On August 10th, 1780, he had left Karunguli with a hundred sepoys, and by pursuing unfrequented paths had eluded the cavalry of Hyder interposed between him and his destination. Late on the afternoon of the 11th he arrived at Wandiwash, and was met by messengers from the killadar, warning him that any advance on the part of his troops would draw upon them the fire of the fort. Flint affected to believe that these messages were the result of a misapprehension, and continued his advance. He was again directed to retire, but on professing to have a letter from the nabob, was granted a conference, slightly attended, near the fort gate. Arrived there he admitted having nothing beyond the orders of his own Government, the authority of which the killadar derisively declined to admit. Remonstrances were useless, and the interview seemed destined to be fruitless, when success was assured by the promptitude of the young lieutenant, who, as the governor was about to retire, sprung upon him, pinioned him, and ordered his escort of four sepoys to stand with bayonets pointed at the governor's breast. The guard were powerless from astonishment, and before they regained their self-possession the rest of Flint's company had reached the spot. The killadar, thus artfully ensnared, reluctantly admitted the whole body, and forfeited the heavy bribe which he had expected that very day to secure from Hyder Ali.

Flint found the works of Wandiwash in a most ruinous condition, though well furnished with cannon. Many of these, however, were useless from want of carriages and insufficiency of ammunition. He at once set to work to repair the works, to construct carriages, and to manufacture powder. No trained artillerymen were available, but this difficulty was overcome by impressing the services of the ironsmiths of the town, and converting them, by dint of frequent drilling, into very tolerable gunners.

Hearing of the miscarriage of his attempt to corrupt the Killadar, Hyder marched to Wandiwash, and invested it early in December. During the whole period of the siege Flint not only maintained the defence under circumstances well nigh as desperate as those under which Clive had laboured at Arcot, but even raised a small body of horse for opera-

tions without the fort. While want and imperfect intelligence hindered the movements of the Commander-in-Chief, he not only amply provisioned his own garrison, but also furnished the army with supplies and reliable information regarding the movements and numbers of the enemy. At an early stage of the siege a serious danger had threatened Lieutenant Flint. Contrary to his desire, the wives and families of the native troops composing the garrison had been allowed to live within the town. Apprised of this fact, Hyder collected the whole number, and sent them forward *en masse* towards the fort walls. A soldier bearing a flag of truce preceded the crowd, who advanced wailing and imploring the garrison to deliver up the fortress as the only means of preserving them from mutilation and dishonour. Besides Flint himself there was but one other European in the fort. Almost every man in the garrison had a wife, and children, or other relatives in the advancing throng, but, regardless of their expostulations, Flint pointed a gun at the bearer of the flag of truce and brought him to the ground. A few shots fired high over the heads of the crowd soon silenced their clamour and made them retreat precipitately.

By January 16th access to the fort ditch had been obtained by means of galleries, and materials for filling it up were in readiness. Matters appeared to be approaching a crisis, and eager eyes daily looked out for assistance from Coote's army, which was known to be about to take the field. On the night of the 17th the sound of a distant cannonade was heard, and the morning light revealed a large force in the distance, clothed in British uniform, and carrying British colours. The enemy's troops engaged in the defence hastily decamped, and every thing seemed to prove that the long-expected succour had arrived. But Flint was sceptical, and observing that the fire of the approaching force was ill-directed, and from such a distance as to be useless, he determined to be cautious. The enemy's galleries, however, having been deserted, he sallied out with a chosen band and set fire to the works in the western attack. The result showed that his suspicions were well founded, for no sooner had the smoke of the conflagration announced to the enemy what had been done, than there poured in from all sides bodies of men who had been concealed in the neighbourhood. But good work had been done in the southern as well as the western attack, and without the loss of a single life Flint returned to the fort

The only result of this feigned relief was to throw upon Hyder the labour of restoring his works, and before this was accomplished news arrived that Coote was advancing to Wandiwash. Despairing of success, the Mysore army abandoned the siege, and retreated to Arcot on January 21st. Thus on the twenty-first anniversary of his former relief of the place, Coote was enabled a second time to raise its siege.

Admiration at the gallantry of Lieutenant Flint filled every mind, and the Commander-in-Chief, without hesitation, recommended that he should be promoted to the command of a company. The recommendation

was approved at Madras, but the Court of Directors objected on the ground that such promotion would be " an inconvenient deviation from the established routine of the service, the rise by seniority." Lieutenant Flint had to content himself therefore with the somewhat barren satisfaction of having earned the approval and applause of his commander.

Soon after the raising of the siege of Wandiwash, operations against Vellore were also suspended and converted into a blockade, the greater portion of the troops engaged before the place being called off with the view of drawing Coote into a general action against superior numbers. The challenge was for some time declined, but in July a battle took place near Cuddalore, in which Hyder, considerably to his own surprise, was completely defeated. Some days previously the siege of Wandiwash had been resumed by Tippu, who surrounded it with a complete line of circumvallation. Batteries were already in position when a message was received from Hyder, announcing his defeat and directing Tippu to attempt the fort at once by escalade, and then to hasten off to intercept the advance of a British contingent arriving by land from Bengal.

Lieutenant Flint received information that the assault was to be made upon the night of July 16th. He was therefore fully prepared to oppose it, and opened a deadly fire of grape upon the enemy as soon as the sound of their approach was heard. A tumultuous noise followed the discharge, and gradually dwindled into silence. Other attempts were made on the same night, as well as on the following day, but all equally failed, and the demoralized condition of the army became so alarming, that Tippu struck his camp and marched to cut off the Bengal detachment. He, however, missed it by advancing along a route which it did not take, and had therefore the further disappointment of learning that a conjunction with Coote had been successfully effected.

Coote had earnestly hoped that this welcome addition to his army would have been accompanied by an almost more welcome addition of draught cattle, but he was disappointed, and it still appeared almost impossible to achieve the relief of Vellore, or to undertake the siege of Arcot, the two great objects now before him. By dint of the utmost exertions an advance was made to Tirupassúr, which was taken. Hyder retired to Pullalúr, where he had annihilated the force under Colonel Baillie, his design being to bring on an engagement on the eleventh day of Ramzán, a day which had proved so auspicious for him in the previous year. It corresponded in this year with the 31st of August, but the battle took place four days earlier, and a dubious victory was gained by the English.

Coote continued pressed for want of means of transit, and consequently of provisions. Reports were, however, received that plenty reigned in the regions belonging to the Chittoor Poligars, and the Zemindars of Kárvétnagar, Kálahastri, and Venkatagiri. The followers of the two former Zemindars had joined the invaders, while

the lancers of Venkatagiri served with the British army; but as Hyder's prospects of success grew more doubtful, his local allies considered it judicious to send assurances to the English camp that their adherence to the enemy had been forced upon them by their defenceless position, which was probably true. All held out assurances of assistance should the British army move into their territories. Sir Eyre Coote accordingly marched to Tirutani, in the Kárvétnagar Zemindari, and reduced the small fort of Pólúr in that neighbourhood, but the numerous foraging parties which ranged over the country met with but indifferent success. Coote's perplexity was increased by a pressing demand for relief from Colonel Lang, commanding at Vellore, who assured the general that a surrender was inevitable unless supplies could be thrown into the fort at an early date. Almost at the same time news arrived that Hyder was at Shólinghur, strengthening a position to obstruct any attempted advance towards Vellore.

The resolution of Sir Eyre Coote to bring on a general battle was soon formed, and on September 26th the army marched seven miles in the direction of the enemy, having left a small garrison in Pólúr with the heavy guns and unnecessary equipage. On the following night torrents of rain fell, and rendered it next to impossible to move the tents. Hyder, aware of this difficulty, concluded that Coote would make no movement on the 27th, and the draught cattle of the army were therefore permitted to stray to a distance in search of pasture, while many of his troops dispersed to bring in supplies.

Early in the morning of the 27th Coote had ridden out to examine the country, and unexpectedly came upon an advanced portion of the enemy established upon a long ledge of rocks. A brigade was at once called up, and the enemy dislodged. On mounting the ridge lately occupied by them, Hyder's camp was clearly visible at a distance of about three miles to the south. The whole army was got into motion with the least practicable delay, and moved into position preparatory to an attack upon the Mysore camp.

"The country," writes Wilkes, "was comparatively open, but ridges and groups of rocks, irregularly scattered over the plain, and emerging to unequal heights, admitted of each party availing itself of the advantages of ground. Hyder's main force was judiciously drawn up behind the crest of a long ridge, not rocky, its front covered with swampy rice-fields, while his guns were placed on the summit of this ridge, or on commanding positions among the more advanced groups of rocks. Exclusive of the advanced corps in position, several detached bodies, exceeding in numerical strength the whole of the English army, were seen in motion towards each flank, and large masses of cavalry were collected on various points, evidently prepared to charge on an appointed signal. In fact the whole movement had operated as a surprise upon Hyder." It is clear that he despaired of success from the very first. The best he hoped for was to save his guns, and to effect this object he

resolved to sacrifice his cavalry. The advance of the English over the broken ground naturally destroyed at times the continuity of their line, and, seizing one of these opportunities, two large squadrons of horse charged at the gaps which appeared in the British ranks. Both were met, as they advanced, with volleys of grape from Coote's artillery, and when the English lines were reached, a destructive cross fire of musketry was poured upon the devoted squadrons from the troops who had in defiling naturally fallen back at an angle to the main line, thus affording an excellent protection to the attacked flanks. One of the two charges was directly repelled, and rode back in confusion, but the other dashed through the ranks, pursued by volleys from the rear rank, which had faced about for the purpose.

Though these charges failed of success, they afforded time for Hyder to have his guns limbered up and removed. The whole Mysore army was soon in rapid retreat, leaving but one gun for the English to capture. Coote's loss in the battle did not exceed one hundred killed and wounded, while on the side of the enemy it was calculated that upwards of five thousand must have fallen.

The distress of Vellore was daily becoming more critical, and though the Zemindars of Kálahastri and Kárvétnagar had, after Hyder's defeat at Shólinghur, deserted his cause and indulged in profuse promises of assistance, Coote found it impossible to obtain within their territories more than a scanty subsistence from day to day. It was rumoured, however, that large convoys of grain were passing at intervals down the Kallúr ghaut to the Mysore army, and, on the chance of intercepting one of these, a detachment was sent on some distance to the west, under the command of Colonel Owen. This officer was attacked among the rocky hills south-east of Chittoor by nearly the whole of the Mysore army, commanded by Hyder in person, but was able, with the loss of all his baggage, to extricate himself from the dangerous position in which he had been surprised. Coote soon joined him, and by the beginning of November, a small surplus of grain was collected from among the Chittoor Páliems, and on the 3rd Coote was enabled to provision Vellore for six weeks.

The operations against this fort, which was defended by Colonel Ross Lang, had continued almost without intermission since the commencement of the campaign, when a large detachment had been sent against the place under one Mír Sahib, and batteries were erected. The fort is situated upon a plain, and is overlooked, at no great distance, by some hills of considerable elevation, from which ordinary artillery might, with comparative ease, command and destroy the whole of the interior of the fort. This disadvantage had been partly remedied by the fortification of three eminences which command the fort, and the possession of one at least of these was therefore almost essential to success. Vigorous operations against the principal drúg, now known as "Sayers' Hill," were begun by the Mysore army under the direction of experienced

French officers. Lieutenant Champness was charged with the defence, with Lieutenant Parr as his second in command. The latter officer had, at the outbreak of the war, been deputed to take charge of the fort of Carnatic ghar, in the Pólúr Taluk, and had travelled thither, disguised as a native, to demand admission. This the Killadar refused, and soon after the Mysore troops were admitted, and Lieutenant Parr was only just in time to escape capture and imprisonment. Half famished, and with bleeding feet, he with difficulty made his way back to Vellore, and was there entrusted with the superintendence of the engineering works in the defence of the drúg.

For five weeks the attack continued without intermission, and a large portion of the wall on one face had been completely destroyed, while approaches had been carried over the surface of the hill to within twenty yards of the breaches. Retrenchments had however been thrown up with the utmost industry and skill, and when the assault took place on January 17th, 1781, it was repelled with great slaughter. A second and a third attempt with ladders were equally unsuccessful, owing to the gallantry of Lieutenant Parr. The faulty construction of the drúg permitted of no flanking fire from its guns, so that a considerable body of the enemy was enabled to remain with impunity at the foot of the retrenchment. Lieutenant Parr, perceiving the danger which thus threatened the place, had the daring to descend by the ladders placed by the enemy against the retrenchment, and speedily expelled the surprised assailants. A few nights later a sortie from the pettah still further relieved the garrison on the hill, by attacking the enemy's works, spiking his guns, and damaging his approaches.

As at Arcot, the garrison of Vellore had to contend against the treachery of the nabob's own servants. A treasonable letter from Mahommed Akbar, the amildar of the place, addressed to Hyder was intercepted, and the traitor placed in irons. His post was conferred upon Mahommed Murád, a distinguished resident of the town, who at his own expense had raised a considerable body of irregular horse, with which he harassed the enemy and brought provisions into the fort.

Sir Eyre Coote's advance from Madras about this time led Hyder to withdraw most of his troops from Vellore, and the siege was from that time converted into a blockade. The scarcity of provisions became so great that grain sold at only two seers for a rupee at a time when money was far less plentiful than at present. Scanty supplies were brought in from the Chittoor Poligars by Mahommed Murád and his horsemen. Redoubts were also erected, and mounted with guns in the neighbourhood of the paddy lands near the fort, and the ryots encouraged to cultivate.

During the blockade Colonel Lang resolved to create a diversion by attacking the hill fort of Kylásadrúg, situated some six miles from Vellore. The pettah was carried by a night attack, and the hill being

ascended, siege was laid to the drúg. At daybreak however the enemy received considerable reinforcements from Virinjipuram, and Colonel Lang sustained an utter defeat. His party was pursued down the hill in confusion, losing 30 men killed, and 40 wounded in the retreat.

The enemy now made the blockade still more complete, and intimidated the people of the neighbourhood by cutting off the noses of all such as were seized in the act of carrying provisions to the garrison, and driving them thus mutilated into the famine-stricken town.

After provisioning Vellore, on November 3rd, Coote advanced to Chittoor and reduced its little fort, deemed important as it was reported to be a depôt for provisions. It capitulated on November 11th after a defence of four days, but the intelligence regarding its importance as a depôt was found to be false. The only consequence of its capture was that the general still further weakened his army by leaving a battalion in garrison, which was eventually sacrificed on the retirement of the army. The garrison left at Pólúr had also been forced to evacuate that fort, and on November 13th news arrived of a reverse at Pallipat, near Shólinghur, where another battalion, in charge of sick and wounded, was driven, it was suspected by the treachery of the Kárvétnagar Zemindar, to retire into the jungle with the loss of its cannon and stores of grain.

As the rains were daily expected, it was now high time to return into cantonments near Madras. The retirement of the army had indeed already been deferred too long, and the monsoon burst upon it almost before the march began. Large numbers of troops and camp-followers, besides valuable cattle, perished from the inclemency of the season, and the health of the Commander-in-Chief himself broke down, so that he was constrained on arriving at the presidency to apply to be relieved from his command.

During the campaigns of these two years not the slightest assistance had been rendered to the English by Mahommed Ali. Not a load of grain had been supplied to the army, and not a single soldier in his pay had served in the English camp. His officers had systematically betrayed, or attempted to betray, his forts to the enemy. One of his renters had endeavoured to sell Vellore, and his own brother handed over to Hyder the important stronghold of Chandragiri without adequate reason. Sir Eyre Coote had been loud in his complaints at "the duplicity and iniquity of the Nabob, Mahommed Ali's Government." He had, he said, not only Hyder, but the whole Carnatic, to contend with, and strongly urged the necessity of assuming the management of the country during the war. The advisability of this measure was distinctly recognized by Government, and the nabob, perceiving the course matters were taking, making a virtue of necessity, agreed on December 2nd, 1781, to resign the revenues of the Carnatic for five years, on condition of receiving one-fifth for himself and his creditors. A

board of management was appointed, which administered the affairs of the districts with such success that their revenues greatly exceeded those of any previous year, and Mahommed Ali found himself enjoying an income larger than he had ever before derived from his territories.

Though greatly enfeebled in health and much disheartened at the wretched equipment of his army, Sir Eyre Coote yielded to the urgent solicitations of the Madras Government to withdraw his resignation, and on January 2nd, 1782, once again joined the army. Three days later, while camped near Tirupassúr, he was discovered senseless in his tent from an attack of apoplexy. His valuable life was however spared, and on the next day he was so far recovered as to be able to accompany his troops in a palanquin. The march was to Vellore, which was again in extremity. On the 9th the army prepared to cross the dry bed of the Poiny river, some two miles from its confluence with the Pálár, when the enemy appeared and made a demonstration of opposing the passage. The caution and skill exhibited by Coote was, however, such that Hyder desisted from the attempt. On the 10th two strong columns of the enemy again appeared, and opened a distant cannonade upon the army as it advanced across some wet paddy-fields. Hyder was, however, powerless to check Coote's progress. On the 11th the convoy arrived before Vellore, and three months' provisions were passed into the fort. Colonel Lang joined Coote's army, and the defence of Vellore devolved upon Captain John Cuppage. On the 13th the army retraced its steps, and was once more opposed near the swampy ground, where the attack of the 10th had taken place. The heavy ground was passed with little loss, and a determined attack was then directed against Hyder's forces, which were driven back and pursued till nightfall. The march to Tirupassúr was diversified by a few empty demonstrations made by the enemy, but nothing noteworthy occurred.

It is remarkable that during the whole of 1781, although Coote was within easy marching distance of Chandragiri, he never advanced so far north as that place. It was still in possession of Abdul Waháb, the nabob's brother, but Coote appears to have been aware neither of its importance nor of the relationship of its killadar to Mahommed Ali. There is strong reason to suspect that Abdul Waháb had, before the war, entered into treasonable correspondence with the Mysore court, for letters were sent from Chittoor to Seringapatam before the invasion, and a vakil from the killadar was seen in Hyder's camp soon after he entered the Carnatic. Hyder appeared at that time to be dissatisfied with the conduct of Abdul Waháb, for a threatening message was returned through the vakil, which induced his master to abandon Chittoor and strengthen himself at Chandragiri. In January 1782 Hyder was able to undertake the reduction of this fort, and Abdul Waháb submitted without a struggle, though he had ample means for maintaining the defence. Hyder agreed to permit him to retire with his family and goods to Madras, but as soon as the fort was given up, alleging

some previous breach of faith on the killadar's part, treacherously sent the whole of his family prisoners to Seringapatam, retaining his two youthful daughters at Arcot.

During the remainder of 1782 the scene of war was removed to the west and south. Though the English suffered a notable defeat at Tanjore, Hyder began to be very far from satisfied with the aspect of affairs, and determined to concentrate his forces, and move to the Western Coast. But previous to his departure he directed the destruction of most of the minor posts in the Coromandel which remained in his possession, and caused the defences of Arcot to be undermined. A few days before the mines were ready to be sprung his despondency was removed by the arrival of a French armament at Pondicherry. He hurried off to meet it, and the united forces, in the early part of 1782, captured Cuddalore and Peramukkal.

Sir Eyre Coote was deeply chagrined at the loss of these two places, and pronounced the condition of affairs to be "not only embarrassing, but desperate." He determined to try the result of a general battle, and for that purpose advanced to Wandiwash, where Flint had for some days been surrounded by the combined armies of the allies. At the approach of Coote the enemy retreated to Pondicherry, whither the English army followed them; but the Commander-in-Chief, being unwilling to risk a battle against superior numbers at a distance from his head-quarters, resolved to make some movement which should draw the enemy away from their ground. He therefore marched to Arni, which had been constituted the chief depôt of the Mysore army in the Carnatic.

Lieutenant Flint had for some time been in secret treaty with the killadar, who had consented to allow the fort to be taken by surprise. Implicit reliance was not placed upon the promise, but Coote was of opinion that, even should his assurances prove delusive, an attack upon Hyder's depôt would afford an opportunity of engaging the enemy upon more equal terms. On June 1st the army moved to within a few miles of Arni. Tippu had been detached by his father with a strong reinforcement, and was not far behind, for on the morning of the 2nd, as the English army renewed its advance, a distant cannonade was opened from various points upon its rear. The precise direction from which an attack might be expected could not be determined, and the troops were therefore engaged throughout the day in a series of fatiguing manœuvres, without further result than the capture of one gun and eleven tumbrils of ammunition. Coote eventually gained the camping ground he had in the morning proposed to occupy, but not before Hyder had dexterously detached a portion of his troops under Tippu, who succeeded in effecting the removal of the treasure and stores from the fort. This achieved, the Mysore army retired.

During the 3rd Coote made arrangements as though to lay siege to the fort, in the hope that the killadar might fulfil his engagements; but

the proximity of Hyder prevented treachery, and on the 4th Coote abandoned his object, advancing against the enemy, who invariably retreated. On the 8th a skilful ambuscade was planned by Hyder, by which the grand guard, under the command of a zealous but inexperienced young officer, was entrapped and surrounded, 166 men and two guns being captured.

Coote's repeated challenges to the enemy having been thus declined, he retired for a time to Wandiwash to refresh his troops, after which he withdrew to Madras, and was forced to resign his command in consequence of the state of his health. Major-General Stuart, the officer next in seniority, succeeded.

Hyder's health had also failed during this year, and on December 7th he died in camp at Narsingaráyanipet near Chittoor where a small monument marks the spot. His death was strictly concealed, and his body sent secretly to the tomb of his father at Kólár, while Tippu was urged, by means of expresses, to join the army without delay. Rumours of Hyder's decease were, in spite of the attempt at concealment, widely spread, and the commandant at Vellore reported the fact as one to be relied upon, as early as December 9th, only two days after the event occurred. General Stuart however persisted in refusing to credit the rumour, and added that even if it were true, "the army would be ready to move in proper time." No movement was however made for sixty days after Hyder's death. The golden opportunity for delivering a crushing blow while the Mysore army was in consternation, and before the heir apparent had returned, was thus lost, and the campaign was in consequence continued for four months. When the army did move, it advanced with the utmost deliberation to Karunguli and Wandiwash, the fortifications of which places were destroyed under instructions from the presidency. Coote had been particularly anxious to preserve these forts, and even General Stuart, though at first acquiescing in the views of Government, subsequently expressed his regret at the precipitancy of the measure.

While in the neighbourhood of Wandiwash an attempt was made by the general to bring on a general action, but Tippu declined the battle, and soon after, hearing of the alarming proceedings of the English on the Western Coast, withdrew from the Carnatic. Before leaving he demolished two sides of the fortifications of Arcot, and destroyed every other important post which he held in the country, with the exception of Arni, in which he left a garrison. General Stuart had had an excellent opportunity of securing Arcot. Arriving there on his march, he found the place abandoned by its garrison, but contented himself with sending word to Mahommed Murád, at Vellore, to come and take possession as killadar. As soon as the army advanced, and before Mahommed Murád could occupy the fort, one Sultan Jung, a russeldar of the enemy, entered it with a large force. Mahommed Murád contented himself with employing the thousand recruits, whom

he had enlisted, in reducing both the upper and lower forts of Sátghur.[1]

It was expected that the veteran Coote would return from Bengal in April 1783 and resume command of the Madras army. He arrived on the 24th, but the improvement which had been observable in his health during his sea voyage to Calcutta had been neutralized by the anxiety and exposure to which he had been subjected while returning, when the vessel in which he sailed had a narrow escape of being captured by some French ships of the line. He landed greatly reduced in strength, and expired two days later.

General Stuart was thus confirmed in his command, and conducted some most unsatisfactory operations against the French near Cuddalore. Fortunately the war in Europe was concluded by a peace between the two nations, and General Stuart, being recalled to Madras, was placed under arrest for his incapacity, and contempt of the authority of the presidency, and eventually sent back to England.

Details are unnecessary of the war on the Western Coast, whither Tippu had betaken himself, or of the expedition of Colonel Fullerton into the heart of Mysore. Just as this officer was in a position to undertake the reduction of the Mysore capital, he was recalled, and English plenipotentiaries were sent to Mangalore for the purpose of negotiating a peace. After treating them with every indignity, Tippu executed a treaty on the basis of a mutual restitution of conquests and prisoners. In this district Ambúr and Sátghur were restored, Arni having already been abandoned by its Mysorean garrison.

It has already been stated that in December 1781 the nabob had assigned his territories to the English Government in consideration of the fact that all the expenses of the defence of the country has fallen upon them. The engagement had hardly been executed when, acting under the influence of his unprincipled creditors, he made every effort to defeat it. Unfortunate misunderstandings existed at the time between the Supreme Government and that of Madras. Taking advantage of these the nabob succeeded, by a series of misrepresentations, in obtaining an order from Calcutta that the assignment should be cancelled. The order was passed in January 1783, and almost together with it arrived the sanction of the Court of Directors to the arrangement of 1781. The Madras Government therefore hesitated

[1] At the close of the war this gallant officer was treated with neglect. A Brahman was appointed to the amildarate of Vellore, while the killadarate of Sátghur, a post which Mahommed Murád richly deserved, was conferred on another. His claim on account of the expense of maintaining men was proposed to be satisfied by bills on Bengal, then at 75 per cent. discount. His only recompense was an inam of 50 kánis of land, obtained for him by General Coote, but this was soon after resumed by the nabob. His son, after the fall of Seringapatam, was appointed tutor to the young princes at Vellore. Here he intercepted a treasonable letter addressed to one of the princes, which he handed over to the Commandant, Colonel Dallas. The only fruit of his fidelity was the loss of his appointment.

before carrying out the orders of the Governor-General, and the Carnatic continued under the Board of Management. Meanwhile the authority of the Court of Directors had been superseded in England by the appointment of the new Board of Control, who peremptorily ordered the restoration of the Carnatic, a step which they considered necessary in order to "give to all the powers of India a strong proof of the national faith." It was directed that the nabob should instead pay twelve lakhs a year for the gradual liquidation of his debt to the Company and to his private creditors. A preliminary treaty was, in accordance with these instructions, concluded in 1785. By this the nabob gave territorial security for the payment of the twelve lakhs to liquidate his debts, and for four lakhs in addition to meet current charges. But the expenses of the peace establishment amounted to twenty-one lakhs, and it was subsequently agreed that this amount should be paid by the Company, the Nabob, and the Rajah of Tanjore, in proportion to their respective revenues. A subsidiary treaty was accordingly executed, by which the nabob agreed to pay ten and a half lakhs as his proportion, and in the event of failure certain districts were to be assigned. The contribution towards the extinction of his debt was reduced by a lakh and a half, and the nabob resigned all political relations with other Native States. In case of war the contracting parties further agreed each to contribute four-fifths of their revenues towards its expenses. This treaty was executed in 1787, and within three years a war broke out,—the third with Mysore.

The only result of the treaty of Mangalore had been to increase the arrogance of Tippu. It was not long before he exhibited unmistakable signs of contemplating a fresh war, and announced to his late allies, the French, that he was only seeking an opportunity of exterminating the English, and annihilating the powers of the Nizam and the Mahrattas.

The opportunity sought for was soon found. In 1789 the Rajah of Travancore negotiated with the Dutch for the purchase of two of their settlements in order to strengthen himself against Tippu. The latter at once objected on the ground that the settlements in question belonged to Cochin, which was subject to him, and he advanced to attack the lines of Travancore.

Lord Cornwallis was at this time Governor-General, and he succeeded in making, in 1790, a tripartite alliance with the Mahrattas and the Nizam against Mysore. As the scene of the war did not lie within this district no details of the operations need be given. It opened unfavourably for the English, and, in 1791, Lord Cornwallis was constrained to take command of the army in person. The troops assembled at Vellore, and a feint was made of ascending into Mysore by the Naikenéri ghaut. Tippu, being misled by the movements of the army, prepared to oppose the advance in the neighbourhood of this pass, but Lord Cornwallis at the last moment diverted his line of march, and, passing through the easier pass of Muglee, camped on February 19th upon the plateau within ninety miles of Bangalore.

Failure of supplies rendered the campaign of 1791 less decisive than could have been wished, but in the following year the army advanced once more with every arrangement complete, and Seringapatam fell. Tippu thus completely overpowered, consented to pay a large sum of money and to relinquish one-half of his territory, which, according to the terms of the tripartite treaty, was divided between the English, the Nizam, and the Mahrattas. The English share consisted of the province of Dindigul, a portion of the present Presidency of Bombay, and the Báramahál. The only portion of the territory thus ceded which is included in the North Arcot District is the Zemindari of Kangundi, which was portion of the Báramahál.

On the outbreak of the war it had been found impossible to realize anything from the revenues of the Carnatic, four-fifths of which should, according to the arrangement of 1787, have been contributed by the nabob. It was therefore resolved to assume the direct management of the country during the war, and at its conclusion the nabob expressed a desire that the treaty of 1787 should be modified. The Madras Government were equally anxious for some new arrangement, as the existing one had been found to be open to many objections. A fresh agreement was therefore made, and a treaty signed on July 12th, 1792, by which the British Government engaged to keep up a military establishment, towards the maintenance of which the nabob was to pay nine lakhs annually; while in the event of war it was stipulated that the whole country should be assumed, one-fifth of its revenues being paid to the nabob. It was further agreed that the Company should collect the peshcush of the chief Poligars in the Carnatic, and should place the amount realized, to the credit of the nabob. Thus the Zemindaris of Kálahastri and Kárvétnagar, as well as the Jaghire of Arni, came under British management almost at the same time that Kangundi was acquired. The peshcush due by these estates was as follows :—

	RS.	A.
Kálahastri	42,712	8
Kárvétnagar	1,14,051	0
Arni	10,052	8

The nabob consented that in the event of his failing to pay, in monthly instalments, the contribution due over and above the Poligars' peshcush, certain districts should be assigned, among which was included the Northern Division of Arcot, comprising only the taluks north of the Pálár. The revenue of the division was estimated at only Rupees 5,92,914.

The loss of one-half of his territories had not suffered to humble the pride of Tippu. He still retained ample means for improving his position, and soon brought his army into the highest state of efficiency by employing French officers to discipline and command it. His actions left no doubt that he entertained intentions of undertaking a fresh war, with the object of destroying the British power in India.

Lord Wellesley, then Governor-General, resolved to anticipate Tippu's designs, and announced the necessity of still further diminishing his power as "indispensable to the safety of the English Government."

By the treaty executed on the division of the Ceded Districts in 1792, the Nizam and the Péshwa had bound themselves to furnish troops should a fresh war be provoked by their common enemy. They were now called upon to fulfil their obligations, but while the Nizam readily acceded to the demand, the Mahrattas refused to co-operate, and subsequently assumed a threatening attitude. The Madras army was however directed to take the field, and General Harris was placed in command. Tippu was filled with dismay at the unexpected promptitude evinced by the English. His troops were continuously defeated, and Seringapatam was again invested. On May 3rd, 1798, an assault was made upon its fortifications, which were successfully carried. Tippu's body was discovered among the slain, and the young princes were taken prisoners.

Lord Wellesley's object was not to annihilate the Mysore state, but merely to reduce its power within such limits as should secure the safety of our empire. As the family of Tippu had forfeited all claim to consideration, and were moreover usurpers, it was resolved to restore a portion of the Mysore territory to the ancient line of rajahs, and a child of five years was drawn from the poverty and obscurity to which his family had been consigned, to occupy the throne. The districts assumed were shared between the Nizam and the Company, after a portion had been offered to the Péshwa on certain conditions, which he declined. Of the Company's acquisitions the Zemindari of Punganúr, and the Taluk of Venkatagirikóta (now Palmanér) lie within this district. The former was valued at Rupees 52,500 and the latter at Rupees 21,000.

In 1795 Mahommed Ali had died, and his son Omdat-ul-Omrah had succeeded. An attempt was made to induce this prince to enter into some arrangement in supersession of that of 1792, the results of which had been found to act most injuriously upon the country. The subsidy due to the Company had indeed been paid with punctuality, but the demand had only been met by raising loans at exorbitant interest, and the nabob was now in the most embarrassed circumstances. He had, contrary to the terms of the treaty of 1792, assigned to his creditors the revenues of large portions of the Carnatic, and these unprincipled persons ground down the ryots, and forced from them higher assessments than they could afford to pay. Under such a system the prosperity of the provinces was being rapidly undermined, and the Government earnestly desired to remedy the evil. The most liberal offers made to Omdat-ul-Omrah on his accession were rejected by him at the instigation of the harpies into whose hands he had fallen, and matters continued to pass from bad to worse.

When war was declared in 1799 the Court of Directors had directed

that the management of the Carnatic should be assumed according to the terms of the treaty of 1792, but Lord Wellesley, unwilling to carry out these instructions, accepted the nabob's most solemn assurances that he would contribute three crores of rupees, and left him in possession of the country.

The promise was infamously broken, and the nabob's failure well nigh involved the British cause in disaster. The indignation of Government at the conduct of Omdat-ul-Omrah was naturally great, and it was increased when, at the conclusion of the campaign, papers were discovered among the State records at Seringapatam which were considered to prove beyond all doubt that the nabob, as well as his father, had for years been carrying on a clandestine intrigue with the Government of Mysore. Such treachery absolved the Government from all obligations resulting from previous treaties, and it was determined for the benefit of the country, as well as for the security of the Company, finally to assume the Carnatic.

Before the resolution of Government had been communicated to Omdat-ul-Omrah, he was lying upon his death-bed, and the announcement was deferred until after his death. He had nominated his reputed son Ali Hussein to be his successor, and to this prince it was explained that his claims would be recognized by the Company, as a matter of favour, on condition that he should resign the entire civil and military authority in the country. Ali Hussein refused to accede to these terms, and Government turned to Azím-ul-Omrah, brother of the deceased nabob, who was considered to possess claims to succeed superior to those of his reputed nephew. Azím-ul-Omrah accepted the conditions willingly, and an engagement was made with him on July 31st, 1801, by which he handed over the whole of his authority over the Carnatic, and accepted a stipendiary allowance of one-fifth of its estimated revenue for the support of himself and his family.

This is the last step by which the various portions of territory now composing the district of North Arcot were acquired.

For a short time after the assumption of supreme authority by the Company, the tranquillity of the district remained unbroken. It was first disturbed by the turbulent conduct of a few of the Poligars holding estates in the Chittoor and Chandragiri Taluks, whose bad example was soon followed by others, until matters had assumed so serious an aspect that military aid had to be summoned.

Scattered over the district are the estates of Zemindars and Poligars, petty chiefs, who, by the weakness of previous governments, had been enabled to assume a position almost of independence. They lived surrounded by large numbers of military retainers, supposed to be employed in the discharge of police duties, but instead of acting as the guardians of property, they too often proved the heads of a licensed banditti, with enormous powers of oppression and plunder.

Mr. Stratton, the first Collector of North Arcot, had early been called

upon to report upon the military resources of the Zemindaris under his charge, and his representations had led the Madras Government to insist on the Zemindari peons being disbanded.

It would have been well had this wise measure been extended at the same time to the less powerful Poligars; for these petty rulers, being permitted to remain with undiminished resources, soon made attempts to return to the irregular line of conduct they had been allowed to pursue with impunity under the previous Mahommedan governments.

There were ten Poligars in North Arcot paying tribute to Government, viz., Bangári, Tumba, Náraganti, Pullúr, Gudipáti, Mogarála, Pákála, Yedaragunta, Pullicherla, and Kallúr. They appear to have been originally appointed by the Vijianagar rajahs, about the close of the fifteenth century, to superintend the police arrangements of the country. In consideration of the services thus rendered, a few villages were granted to them at a favourable rent, and they were authorised to collect, for the support of the peons whom they maintained, fees (called kávelly) from all villages within their ranges. As long as the authority of the Vijianagar kingdom continued unimpaired the object of their institution was fairly fulfilled, but after the battle of Telikóta, the general condition of anarchy which prevailed in these parts tempted these large kávelgars to aim at independence. Assuming the title of Poligar, they seized upon the whole of the villages within their respective ranges, and discontinued the payment of quit-rent on those they had hitherto held as inam.

For upwards of a century they continued in a state of independence and lawlessness, but about the close of the seventeenth century the Mahommedan Government, which had now begun to establish its authority in the land, resolved to reduce them to submission. A small army was sent against them, under the command of one Ghulám Mahommed, who, after a somewhat doubtful struggle extending over some years, seized the persons of the Bangári and Mogarála Poligars, whom he put to a cruel and ignominious death. The others, intimidated by this example, speedily submitted, and for the first time paid tribute to the Government to which they were subordinate.

During the administration of Dóst Ali, however, the Poligars ventured to withhold the full payment of their peshcush, and when the disturbances began, which followed the return of Chanda Sahib from his captivity at Sattára, they threw aside all pretensions to subordination, and once more asserting their independence declined to pay any tribute whatever.

When the authority of Mahommed Ali was at length firmly established he resolved to bring back his refractory tributaries to submission, but instead of undertaking the duty himself he committed it to his brother Abdul Waháb, to whom he granted the districts of Chittoor and Chandragiri in jaghire, with the right to receive the Poligars' peshcush.

Abdul Waháb appears to have had small success in enforcing the

necessity of obedience upon his troublesome subjects, and only collected such inadequate sums as the Poligars chose occasionally to pay. When he was dispossessed of Chandragiri and made a prisoner by Hyder, they relapsed once more into their irregular ways.

In this lawless condition were the Chittoor and Chandragiri Páliems when the Carnatic was ceded in 1801. For a short time after the cession, the Poligars had the prudence to restrain their predatory inclinations within comparatively moderate bounds, but they became dissatisfied and inclined to rebellion when Mr. Stratton proceeded to raise their tributes to sums which he considered more adequate to their resources. With the sanction of Government he assumed the management of the police throughout his districts, and deprived the Poligars of their right to collect kávelly fees.

Such a curtailment of their importance and revenues was naturally distasteful to the Poligars, who, with the exception of Gudipáti, positively declined to pay the enhanced peshcush, fell into arrears, and began to indulge in their old habits of plunder and rapine.

In June 1803 Mr. Stratton reported that the peons of the Náraganti Poligar had attacked and plundered the village of Utanthángal. His enquiries disclosed the fact that they had acted under the orders of the Poligar himself, who had shared in their plunder, and it further appeared that the same party had, before their raid upon this village, started for Chittoor, intending to loot the treasury. They were only prevented from carrying out these intentions by the accident of one of their party tripping and falling to the ground, a circumstance regarded as an omen of ill success. There was reason also in another case to suppose that the Tumba Poligar had instigated an attack upon a certain Captain Nuttall, who was travelling through that páliem; indeed most of the Poligars had indulged in such lawless excesses, that Mr. Cockburn recommended, since all his arguments failed to move them, that prompt and decisive measures should be taken to bring them to reason. He urged the advisability of making a military demonstration, but troops at the time could not be spared, and the officer commanding the garrison in the fort of Chittoor considered his force too small to venture upon making any advance into the Poligars' estates.

The first step taken by Mr. Stratton to prove that he was in earnest in his warning to the defaulting tributaries, was the arrest of the Náraganti Poligar, whom he left in restraint when he was relieved of the charge of the district by his successor, Mr. Cockburn. Mr. Cockburn, trusting to the Poligar's promise that that he would discharge the arrears within twenty days, released him, but when, after this period had expired, a letter of remonstrance was despatched, the bearer of it found armed peons assembling from all quarters at the Poligar's fort, who surrounded and threatened him, and insultingly bade him carry back the letter to him who sent it.

On hearing of this act of perfidy and show of resistance, the Govern-

ment of Madras directed Mr. Cockburn at once to resume the whole of the lands and russooms of the refractory Poligar, and on July 6th, 1804, ordered that a battalion should at once march to Chittoor to enforce the order. The resolution of Government was announced in a circular letter to all the Poligars, except Gudipáti who still remained faithful, in the hope that the knowledge of the decisive measures decided upon would create an impression upon their minds.

The battalion arrived at Chittoor on July 17th, under the command of Lieutenant-Colonel Darley. A company of pioneers accompanied it, in order to carry out the instructions of Government regarding the destruction of all the fastnesses of the Poligars, and the opening up of the country by the construction of roads. Mr. Cockburn at once dispatched announcements to the refractory Poligars that a military force had arrived to compel them to submission, but assured them of protection and safety should they at once attend him and make arrangements for discharging their arrears. None of them attended, but each sent a vakil. Bungári and Yedaragunta were keeping a fast; Pulicherla and Kallúr had taken physic; and each of the others had some like frivolous excuse for their absence. Their vakils were then called upon to execute engagements for their principals, but declared that they had no authority to do so, and returned bearing with them the conditions imposed by the Collector. The Mogarála Poligar, who also administered the affairs of Pákála, as the Poligar of that place was a minor and a relative of his, declared himself unable to pay his arrears within the limited period of eight days, and objected to the alternative of resigning a portion of the estates. He at the same time collected his followers, and arming them, prepared to resist. On July 25th the battalion, leaving the Náraganti Páliem to be disposed of subsequently, marched to Pennamari, and prepared to invest the fort, which Colonel Darley intended to attack early next morning, but in the evening the Poligar declared himself ready to resign two-thirds of each of the estates which he managed, and by thus throwing the commanding officer off his guard, escaped during the night with from 800 to 1,000 of his followers. The fortifications of the place were at once destroyed, and on the 28th the Poligar, despairing of success, surrendered himself and his ward. He was sent in custody to Vellore, while the minor was detained in Chittoor. Both were soon afterwards forwarded to the fort of Chingleput.

On July 31st Mr. Cockburn desired Colonel Darley to take measures for the assumption of the Páliems of Kallúr, Pulicherla, Bangári, Yedaragunta, Pullúr and Tumba, as the proprietors of these estates had not acceded to the terms of settlement proposed to them. The detachment therefore proceeded northward into the Chandragiri Taluk, and Kallúr and Pulicherla, on hearing of the approach of the battalion, fled into their jungles. The drúgs and barriers were destroyed, and possession taken of the estates. Proclamations were at the same time issued, inviting the chiefs to surrender, and promising personal safety and consideration in the event of their doing so.

The Poligar of Pullúr had at first consented to relinquish in land an equivalent to the balance that he owed to Government, but he afterwards repudiated the agreement and peremptorily ordered those who were sent to settle the accounts to leave his páliem. Colonel Darley's next step was therefore to march into his territories, where the Poligar had assembled all his followers, and obtained a solemn promise from them that they would stand by him to the end, a promise which they faithfully fulfilled, for they opened fire upon the sepoys as soon as they appeared, and defended the first barrier with the utmost obstinacy, until in the evening it was carried by assault. The Poligar made good his escape to the top of the hill, which is of great natural strength, and descending in the darkness by a secret pathway unknown to the besiegers, escaped and joined his friends Bangári, Yedaragunta, Tumba, and Náraganti, who had sent men to assist him in his unsuccessful struggle. As the fortifications of Pullúr, the strongest in the páliems, had been so speedily reduced, the hopes of the rebels now diminished, and they made little further opposition to the battalion.

After the works at Pullúr had been demolished, those of Tumba and Bangári, which were found deserted, were treated in a similar fashion. The Bangári Poligar had at the first appearance of open rebellion retired to the Cuddapah district. He was an infirm old man, eighty years of age, who seems to have been well disposed towards the Government, and to have entirely disapproved of the conduct of his eldest son, the Yedaragunta Poligar, who, contrary to his father's advice, had joined the rebels.

With the exception of an engagement near Nágapatla on September 19th, in which the Poligars of Kallúr, Pulicherla and Pullúr were easily defeated, no further resistance was met with. On September 24th an attempt was made to capture Chandúrkonda, a hill very difficult of access, but Captain Armstrong, who led the detachment, was misled by his guides, and all the Poligars' men succeeded in escaping.

The insurgents had by this time been entirely driven from their own country, and were wandering about in the densest parts of the jungles, where they were safe from pursuit; but a large number of their followers, acting independently, scoured the country in bands, pillaged villages, and seized all the passes leading to Tirupati, intending to plunder the pilgrims travelling towards the temple. Some of the Mogarála and Pákála men, who were the most active in these operations, succeeded in surprising a party of sepoys and Government peons stationed at Mogarála, five of whom they killed, and after disarming the whole body, dismissed them. So daring did the conduct of these men at length become, that it was found necessary to protect both lower and upper Tirupati with a strong force of sepoys, as it was rumoured that the rebels were contemplating an attack on the temple itself. A body of 150 peons was raised to patrol the roads leading to Tirupati, and 500 more enlisted and distributed among the villages in the unsettled parts of the taluks.

On September 22nd the Government, hoping to settle the disturbances by peaceful measures, appointed a commission consisting of three members, Messrs. Webb, Hurdis, and Stratton, the last having been Mr. Cockburn's predecessor, to settle the affairs of the páliems. They reached Chittoor on October 6th, and at once directed that all measures which might affect the Poligars should be suspended. The troops were therefore withdrawn from the páliems, where indeed they had been able to effect but little, having been constantly misled by false rumours regarding the whereabouts of the banditti. An attempt to pursue them into the thick jungles of Bangári only resulted in the rebels making a raid upon several villages on the plains, which they laid waste and pillaged. The pioneers, however, had done good work. After destroying various barriers and forts, they constructed a road, 50 feet wide, from Náraganti to Chittoor, and continued it as far as Vellore. Another road was also opened between Pardarámi and Venkatagiri, the chief towns respectively of the Yedaragunta and Bangári Poligars.

Before the arrival of the special commissioners some of the rebel Poligars had shown signs of an inclination to submit. Pulicherla himself wrote to Colonel Darley offering to surrender on that officer's letter of safe conduct, and a vakil of the Punganúr Zemindar brought similar messages from Kallúr.

One of the first acts of Mr. Webb and his coadjutors was to set the two captives at Chingleput at liberty, a measure which encouraged several of the others to come into Chittoor. The faithful Poligar of Gudipáti was the first to attend the commissioners, and he was followed by Náraganti, Pullúr, Yedaragunta (on behalf of himself and his aged father), Kallúr, and lastly, on October 24th, by Tumba. They were called upon to sign an agreement binding themselves to the following terms: that they should disband their peons (upwards of 5,000 attended them at Chittoor) within one month; should erect no new fortifications, but should destroy such as remained; should assist in opening up the jungles by constructing roads; should pay up their arrears in full by December 15th, or assign the whole of their páliems to Government until the amounts due by them has been realized; should agree to a survey of their estates and the settlement of a peshcush of two-fifths of the value estimated by such survey; and should in future lead orderly lives and obey the orders of Government in all things. The Poligars of Pákala, Mogarála and Tumba signed this agreement with little apparent hesitation, but Yedaragunta, when called upon to execute the document, offered frivolous excuses. The Kallúr Poligar sent his previous excuse of illness; while Pullúr had the effrontery to reply to the commissioners' summons that he was busy hunting. Hardly had the commissioners time to recover from the surprise caused by these evasive messages, when they learned that Pákalá and Mogarála had gone off with Kallúr and Pullúr, attended by a large number of armed peons, and that the chiefs of Tumba and Yedaragunta had

quickly followed them. After waiting fruitlessly for two days hoping that the Poligárs would perceive the folly of such conduct, three companies of sepoys were called up from Nangamangalam, whither Colonel Darley had retired, and the commissioners reported to Madras that they now felt convinced of their inability to bring the rebels to a sense of their duty. As all attempts at conciliation had thus proved vain, Government deemed it expedient that active measures should once more be resorted to, and a detachment was accordingly ordered to assemble at Chittoor under the command of Lieutenant-Colonel Moneypenny. It consisted of upwards of 3,000 men, including artillery and cavalry: martial law was proclaimed, but before taking the field, Colonel Moneypenny issued a proclamation inviting the rebels to submit within seven days. This did not apply to Gudipáti and Náraganti, who had not joined the others in deserting the commissioners. In consideration of his last act of faithfulness, the Náraganti Poligar was granted a free pardon for his misconduct, but his páliem, together with all the others with the exception of Gudipáti, was directed to be resumed. The terms offered by Colonel Moneypenny were accepted by the Poligars of Bangári and Tumba, but after the week had expired: the former, it was proved, had never received the proclamation, since his son Yedaragunta had intercepted it, and Tumba pretended that he had really been prevented by illness, so that the submission of these two chiefs was accepted. The Kallúr and Pulicherla Poligars surrendered to Colonel Munro in the Ceded Districts, but Pákála and Mogarála resolved to continue the contest to the bitter end. The detachment was therefore marched against the hill of Mogarála, where the rebels had taken up their position, and where they successfully resisted every attempt to dislodge them during the day; they were however so disheartened by the results of the attack, that they evacuated the place during the night and overran the country, eventually retreating beyond the Cuddapah frontier, and surrendering to Colonel Munro on receiving a promise of life and liberty.

Upon hearing of the certainty of an engagement at Mogarála, the Pullúr Poligar started to the assistance of his friends there, but it is uncertain whether he succeeded in reaching the hill before it was evacuated. He however caused considerable trouble by aiding in the plunder of the country, and being closely pursued, followed the example of Mogarála and Pákála in surrendering to Colonel Munro.

The only rebel still at large was now the Poligar of Yedaragunta, who had shown himself to be the most daring and desperate among the insurgents. He was joined by the dispossessed Poligar of Chárágal, in the Palmanér Taluk, who for rebellion had been imprisoned by Colonel Read in the fort of Krishnagiri. In 1794 he succeeded in escaping from his confinement, and became a vagabond. Hearing of the disturbances in the neighbourhood of Chittoor, he hurried to join the rebels, and received command of a portion of the Yedaragunta peons, with

whom he took possession of his ancient stronghold of Peddanaidi-drúg, and plundered several villages in the neighbourhood of Ambúr.

To assist in reducing this force a reinforcement marched from Mysore. These, together with Colonel Moneypenny's troops, and upwards of 1,000 irregular peons, enlisted for the purpose of penetrating the jungles, formed a formidable array. The rebels made two desperate attacks upon the Mysore detachment under Captain Little, but were defeated, and soon after the drúg was invested on all sides. Seeing that no hope remained, they disbanded their troops and escaped into the jungles, where after some time they were captured and hanged.

On February 8th, 1805, the Collector was able to report to Government that the Chittoor Páliems had at length been reduced to perfect quiet. Martial law was suspended, and the detachments were recalled; but Lieutenant-Colonel Darley still remained in the neighbourhood with a small force to preserve peace.

The Pákála, Mogarála, Pullúr and Yedaragunta Páliems were declared forfeited, and the three surviving chiefs ordered to reside in Madras. The others were granted an allowance of 18 per cent. upon the revenues of their estates until such time as Government should restore them upon permanent sunnuds.

Within little more than a year after the pacification of the Chittoor Páliems the peace of the district was again disturbed by the Vellore mutiny.

After the fall of Seringapatam Tippu's twelve sons and six daughters had been removed to Vellore. The fort, from the strength of its walls and the voracity of the alligators, with which its capacious ditch was filled, had been deemed a suitable place for their confinement. Two of the sons were married, having their families residing with them, and the whole party, including servants, amounted to several hundred persons. The liberality of Government had supplied them with a suitable residence, the privacy of which was undisturbed save by the casual visit of the officer commanding the garrison.

Vellore was at this time garrisoned by four companies of Her Majesty's 69th Regiment, a few invalid artillerymen, and a battalion of the 1st Regiment, with another of the 23rd Regiment, of Native Infantry. While the number of the native troops was upwards of 1,500, the Europeans were only about 370 strong. The officers resided some in the cantonment, others in bungalows within the fort.

Early in 1806 it was generally known to the officers that a spirit of dissatisfaction prevailed among some at least of the native troops. Mahommedan fakirs had been observed wandering about the country in unusual numbers, and the sepoys had more than once shown signs of discontent. Sir John Craddock, recently appointed Commander-in-Chief of the Madras army, had imprudently issued several new regulations calculated to offend the prejudices of the sepoys. Hindus were forbidden to appear on parade wearing earrings or bearing upon their

foreheads the marks distinctive of their sect. Mussulmans were ordered to shave their beards and trim their moustaches in a particular manner. But the most powerful exciting cause of disaffection was the introduction of a new leather head dress, supposed to bear some distant resemblance to the European topee, and a new turnscrew formed in the shape of a cross, and ordered to be worn next to the heart. Advantage was seized of these annoying innovations by the emissaries of the Mysore party, who began to instil into the minds of the native garrison a suspicion that the English intended to force them to adopt the Christian religion. Early in May it was reported to Madras that disaffection had openly appeared, and that one battalion, the second of the 4th Regiment, had broken out into mutiny, refusing to wear the new head dress. The Commander-in-Chief at once visited the station and a court of enquiry was held. Some of the sepoys were found guilty and sentenced to receive from 500 to 900 lashes, but these punishments were remitted upon the public submission of the culprits. The mutinous battalion was removed, and its place supplied by another from the 23rd Regiment.

Discontent however still hung about the garrison, secret associations were formed, and meetings held in which the Mysore emissaries did their utmost to excite the sepoys to rebellion. Most of this was known not only to the people in the bazaars, but to the officers themselves. A Mahommedan fakir for many days walked publicly about the town announcing the approaching destruction of the English; but little regard seems to have been paid to these warning signs. No European reinforcement was applied for, and no checks imposed upon the dangerous intercourse between the Mysore party and the native troops.

On June 17th an event occurred which should have roused the officers from their feelings of false security. A sepoy of the 1st Regiment, named Mustápha Bég, secretly informed his commanding officer, Colonel Forbes, that a plot had been planned for the extermination of the European officers and troops. Colonel Forbes not only disbelieved in the imputed treachery of his men, but referred the matter for enquiry to the native officers of the regiment. These being themselves leaders in the conspiracy, pronounced Mustápha Bég's story to be without foundation, declared him to be insane, and caused him to be placed for some time in confinement. The faithful sepoy was subsequently rewarded by the present of 7,000 rupees and a subadar's pension.[1]

On July 9th the European garrison retired to rest in fancied security, though a warning had on that very day been given of what was about to occur. A European officer had been grossly insulted on the parade

[1] It was alleged by some that Mustápha Bég was one of the chief instigators of the mutiny. The reward bestowed on him caused the greatest dissatisfaction to the rest of the sepoys.

ground by a sepoy, and an ominous feeling of general expectancy was observed among the native troops. The outbreak, which took place before the morning, appears however to have been premature. The combination of adherents of the family of Hyder and others from Mysore with the neighbouring disaffected Poligars had not been matured, and the plan of the mutiny was thus destroyed. The treachery of Mustápha Bég seems to have aroused the fear of his co-religionists, and to have led them to hasten the execution of their schemes.

An opportunity was afforded by the appointment of a field day for the battalion of the 23rd Regiment early in the morning of July 10th. On such occasions sepoys were accustomed to sleep within the fort in order that they might be ready to get under arms at an early hour. The battalion of the 1st Regiment, among whom were the chief conspirators, furnished guards upon the night in question, and the Mahommedan native adjutant contrived to post as many of his own faith as possible on this duty within the fort. Other accomplices of the 1st Regiment made various excuses for spending the night within the walls.

At 4 o'clock in the morning the alarm was first raised. At that hour the battalion of the 23rd had been drawn up on the parade ground under the orders of their native officers, and ball cartridge was served out as though for target practice. While these preparations were being made, a band of the mutineers was silently marched down to the main guard, which was chiefly composed of Europeans. The native sepoys of the 1st Regiment on guard there had prepared themselves with loaded muskets, and upon the arrival of the party from the 23rd Regiment in support, turned upon their unsuspecting European comrades and despatched them. This done, part of the mutineers ran to the regiment on parade, and announced, with affected surprise and alarm, that the English were killing all the natives they came across. The greater part of the 23rd Regiment was composed of Hindus, who, there is reason to suppose, were not parties to the conspiracy. Hearing the alarming news brought from the main guard, they allowed themselves to be marched to the European barracks (now the Civil Dispensary) and to be drawn up around the building. There, under orders of their native officers, they poured in volley after volley upon the defenceless and sleeping soldiers, who, half-clothed, and without means of retaliation, crouched behind pillars or the scanty furniture which their quarters contained.

Meanwhile all posts of importance, including the powder magazine and pagoda, which was used as an arsenal, were secured by parties of the 1st Regiment, while a select band set out on the errand of massacring the European officers. Colonel Fancourt, who commanded the garrison, was their first victim. Aroused by firing at the main guard, which was close to his house (now occupied by the Sub-Collector), he hastily ran out in his dressing-gown to inquire the cause. He was shot at his own door, and survived but a few hours. Colonel McKerras, of the 23rd Regiment, was brought down on the parade-ground as he hurried

to the barracks of his regiment. Major Armstrong was passing outside the fort in a palanquin when he heard the sound of fire-arms. Alighting he advanced to the crest of the glacis and asked what the firing meant. The answer was a volley fired by some mutineers on the ramparts, which killed him on the spot About a dozen other officers were killed unarmed in their houses with their wives[1] and children, some even in their beds. A few hair-breadth escapes occurred. One officer concealed himself under his bed, hidden by a bolster from the sight of the rebels, who were searching the room. Others had sufficient warning to elude the mutineers, and a few of these collected in a house near a corner of the European barracks, where they lay hid until the sepoys had begun to disperse for plunder. The fire having slackened they made a dash for the barracks and broke their way in through its windows. The building was found strewn with the dead, dying, and wounded, for the fire of the rebels had proved most destructive. Having possession of the magazine, continuous supplies of ammunition had been served out to them, and two pieces of cannon being found in the arsenal ready mounted, had been brought to an unoccupied barrack, directly in front of that of the 69th, on which they opened fire. In all this they were assisted by dependants of the Mysore family, Tippu's second son, Futteh Hyder, personally encouraging the rebels.

Recovering from their first surprise, the soldiers had made a gallant defence. Though without officers, they were rallied by some of their sergeants, took possession of the barrack gateway, and made several fruitless sallies with the bayonet. But for the determination thus displayed the rebels would have forced the gate and despatched the whole number in the building. Many instances of individual bravery are on record. One of the most signal was that displayed by a soldier posted as sentry over the magazine. An officer who ran past him, pacing up and down with the utmost composure, inquired whether he knew that the sepoys were murdering the Europeans. "I thought as much," he replied. "Why don't you fly for your life?" exclaimed the officer. "I was posted here," he said, "and it is my duty to stay. I've six rounds in my pouch, and I'll sell my life dearly." The noble fellow was afterwards found dead at his post.[2]

Of upwards of 300 men who had been in the barracks, not more than 150 were able to join the officers in breaking out of the building and making for the ramparts close by. Here they were shortly joined by three more officers, including Captain Barrow of the 69th, who took command of the gallant band. An attempt to gain possession of the magazine having failed, they forced their way to the cavalier at the north-east angle of the fort, and, dislodging the sepoys who occupied it, took

[1] Kaye says that the ladies were spared, the Mysore princes promising to hand them over to the leaders of the mutiny after the English were exterminated.

[2] Captain Blakiston's "Military Adventures under Wellington," to which book I am indebted for many of the particulars of the mutiny.

possession. In this struggle Captain Barrow and other officers were disabled. Leaving a party to guard the wounded and hold the cavalier, the main body still fought its way along the ramparts until it reached the top of the fort gateway, where, sheltered by the bastion wall and some neighbouring bungalows, Sergeant Brodie and a small European guard had maintained their post for several hours, all their officers having fallen.

Fastened to the wall near this part of the fort, a rope was found which had been used to admit some of the mutineers from without. The officers after some consideration deemed it prudent to make use of this mode of egress to escape from the fort, but they could not persuade many of the men to accompany them. With a few they descended, and made their way to the fort on Sayers' Hill, on the other side of the town, of which they took possession. Some hundred men remained bravely at the post of danger, and in default of combatant officers, placed themselves under the command of two young Surgeons named Jones and Dean To the resolution and untiring energy of these two young men it is chiefly due that the fort was not given up to the rebels.

While these events were progressing, the leaders of the mutiny were acting as though already in secure possession of the fortress. Proceeding to the mahâls they proclaimed Futtéh Hyder as rajah in the open square of the buildings. The Mysore flag, bearing tiger's stripes upon a green field, was produced, and being hoisted on the fort flagstaff, was nailed to it. Perceiving this, Messrs. Jones and Dean, taking about sixty of the men under them, forced their way to the flagstaff, where one of the 69th undertook the perilous duty of climbing the pole and unfastening the flag. He accomplished his errand in safety, and brought the flag down in triumph.

At this juncture succour arrived. Major Cootes, an officer of one of the native regiments, who happened to live without the fort,[1] started as soon as the alarm was raised, and rode post-haste to the large cavalry station of Rânipet, 14 miles distant. At about 7 A.M. information was given by him to Colonel Gillespie, who commanded Her Majesty's 19th Dragoons, and was an old friend of Colonel Fancourt. He was to have spent the previous evening at Vellore, and to have slept at Colonel Fancourt's house on the fatal night, but urgent business had detained him, and when Colonel Cootes arrived he was about to start for Vellore, intending to breakfast with the Fancourts. On hearing the sad news, he at once started with a squadron of his own corps and a troop of the 7th Native Cavalry, leaving orders for the rest of the cavalry to follow with the galloper guns attached to the 19th Dragoons. He reached the Vellore fort shortly after 9 A.M.

The entrance to the fort was guarded by four massive gates. Of

[1] Some accounts represent him as having escaped from the fort by swimming the ditch, then full of alligators.

these the two outer were closed, and the two inner open. On Colonel Gillespie's arrival a few men of the 69th were lowered into the space between the two closed gates, and unfastened the bolts of the outermost. As every effort to force the inner one proved fruitless, the Colonel caused himself to be drawn up to the ramparts by the rope already referred to, and infused new courage into the defenders by his example. Though still without ammunition, repeated attacks from the rebels were repelled by charges with the bayonet. At about 10 A.M. reinforcements of cavalry arrived, escorting the galloper guns. One of these was applied to the gate, which flew open at the first discharge. It was then arranged that Colonel Gillespie with the remains of the 69th should descend from the ramparts into the fort, while the cavalry, after giving them a fair start, should dash in through the gateway.

The 69th were met by a severe cross fire, and were falling back, when the dragoons galloped in sword in hand. Colonel Gillespie was himself ridden over in the charge and considerably bruised. Dispersing the sepoys in the neighbourhood of the gate, the squadron formed in line on the parade ground, and pursued the now flying rebels, who were making their way towards the narrow passage of escape afforded by the sally port. Numbers were cut down while thus in retreat, and many others despatched upon the glacis by a troop of dragoons and some native horse sent round to intercept the fugitives. The native cavalry had throughout nobly co-operated with their European comrades. No quarter was given. All the buildings in the fort were explored, and mutineers found in them pitilessly slaughtered. A considerable number had taken possession of the deserted European barracks, from whence they fired on all who passed. A party of dragoons and Governor's Body Guard dismounted, entered the building, and despatched those within. The sickening sight of the mutilated bodies of the Europeans here, and of the sick of the 69th, who had been dragged from the regimental hospital and butchered in front of the mahál gates, excited the most lively feelings of resentment, and the men clamoured to be allowed to enter the building and revenge themselves on the princely instigators of the plot; but Colonel Gillespie held them back. Upwards of a hundred rebel sepoys who had sought refuge in the mahál's were however brought out, and being placed under a wall, were fired at with cannister from the guns. The total number of mutineers who were killed was very great, eight hundred being found dead in the fort alone. The refugees were mostly captured by the police in neighbouring villages, and no less than six hundred were in irons at Vellore and Trichinopoly at one time for their share in the proceedings. A few of these were allowed to serve in other regiments, but most were discharged from the service. Three native officers and fourteen non-commissioned officers and privates were condemned to death at Vellore. Some were hung, some shot, and some blown from the guns. The last mode of execution produced the profoundest impression. A spectator describes how numbers of kites accompanied the party to the place of

execution, "flapping their wings and screeching as if in anticipation of the bloody feast, till the fatal flash Bhich scattered the fragments of bodies in the air, when, pouncing on their prey, they caught in their talons many pieces of quivering flesh before they could reach the ground. At sight of this the native troops employed on this duty, together with the crowd assembled to witness the execution, set up a yell of horror."

Thus ended the Vellore mutiny. The immediate object of the sepoys was to massacre all the Europeans, and to seize the fort in the name of the Mysore family. Their ulterior motives are not certainly known, but Lord William Bentinck, the Governor of Madras, in his General Order on the subject, referred to "the extent of the plans which are ascertained to have been connected with the insurrection," which, after careful enquiry, "there was every reason to believe was excited by interested persons, and was fostered by the deepest intrigue, in which the native army of this presidency had no part, with the exception of the two battalions composing the unhappy garrison." The general impression was, however, that the disaffection was widespread among the Mahommedan sepoys of the army, and that, had the mutiny been successful, there would have been a general rising. "No one knew," writes one who took part in the recapture of the fortress, "how deeply rooted or extensive might have been the plot. The English seemed to stand as it were on a volcano, one eruption of which had been experienced, and which might be succeeded by others, they knew not how soon. Indeed, it was a considerable time before this feeling subsided."

In consequence of the revolt the family of Tippu was removed to Calcutta, and the Governor, with the Commander-in-Chief of Madras, were summarily recalled to England.

Since 1806 two alarms have been raised in the district, both at Vellore, which is largely inhabited by Mahommedans. In 1838 a foreigner giving himself out to be a Turk, travelling from Hyderabad through Kurnool and Cuddapah, was arrested with treasonable correspondence in his possession. His seizure was followed by that of about a dozen others suspected of being his accomplices, and a mulvie of the town was imprisoned for using treasonable language and publishing a treasonable book.

The last alarm occurred in 1869. Early in May of that year anonymous petitions were received by the Joint Magistrate and the Assistant Superintendent of Police, stating that the Wahábee Mahommedans of Vellore were in league against Government, and had arranged a plot for the massacre of all the European residents on the 21st of the month, in which the 28th Regiment Native Infantry, then stationed at Vellore, was deeply implicated. An East Indian subordinate of the Public Works Department also reported to the District Engineer that he had overheard a Mahommedan munshi of the Small Cause Court speaking to a shop-man of his faith about the seditious preaching of a certain kházi. The munshi was sent for, and described what he said had occurred in a certain mosque, where sedition had been openly advocated by a

Wahábee missionary who had recently arrived from Hyderabad, as well as by others. It was ascertained that a foreigner of this description had visited Vellore, and after having been entertained by a subadar of the regiment, had gone to Madras, but the munshi's witnesses failed to corroborate his story, with the exception of one whose evidence appeared open to suspicion. The Joint Magistrate therefore returned to camp, leaving the Police to make further enquiries.

That secret investigations had been made, and something of the nature of the matters under enquiry, was soon known through the town. False and exaggerated rumours got afloat, and created very general uneasiness. The matter found its way into the newspapers, one of which published a letter written by one of the lady residents of Vellore to a friend, which exhibits the feelings of alarm then prevalent. "There is," she wrote, "a *very* mutinous spirit at work here. * I fear that we have a very poor chance of escape, in fact, *none*, as we could not reach the railway station without passing through the lines, and then the large Mussulman town. In 1806 they murdered *all* the officers here, of whom there are 45 buried in *one* grave. It *was*, it appears, their intention to kill us all on the 21st, and as far as I can see there is no reason to suppose that they will not carry out their kind feelings towards us. What can we do? At most 70 against 600!"

Meanwhile the Deputy Inspector-General of Police assiduously prosecuted his enquiries, and collected a good deal of alarming hearsay evidence of the supposed conspiracy, which he hastily communicated to the officer commanding the 28th Regiment, who held a court of enquiry, while he issued arms and ammunition, as a matter of precaution, to the European pensioners of Vellore. "The court of enquiry however elicited nothing to indicate that the report of disaffection in the regiment, which had been so hastily accepted and communicated to the commandant, had any foundation whatever, and as soon as the Joint Magistrate and Deputy Inspector-General heard what had been done by the officer commanding the station, they returned to Vellore, and after consultation with that officer, the arms and ammunition issued to the pensioners were withdrawn."[1] The Inspector-General of Police at this time arrived at the station, and after making most careful enquiries, was able to dissipate the fears which had been excited. It appeared from his investigations that the whole affair had been nothing more than a conspiracy, among the orthodox Mahomedans, to arouse alarm regarding the designs of the Wahábees, and to prevent these sectarians from frequenting their mosques. The popular disquiet quickly subsided, and since 1869 nothing has occurred to disturb the district.

[1] G.O., dated 14th June 1869.

CHAPTER III.

REVENUE HISTORY.

NOTHING is known regarding the revenue system of the Kurrumba inhabitants of the Carnatic. Adóndai, after the subversion of the Pallava line, is reputed to have peopled Tóndimandalam with 300,000 immigrants from the west and south, of whom one-fifth are said to have been of the Vellála caste. The system which he established, called the merási system, is the first of which we have any record.

The cultivable lands of the conquered country are said to have been divided among the Vellála immigrants, who were moreover given the title to participate in such communal rights as pasturing cattle or cutting fuel, on the village waste lands. The hereditary possession of these lands and privileges belonged to the Vellálas alone, and was originally known by the term kániátchi, a word which after the introduction of the Mahommedan rule was displaced by the Arabic expression merási. The merási right of the Vellálas must, however, be distinguished from official merási, or the right of village servants to hold land free of rent, or on very favourable terms.

At first there appears to have been no permanent apportionment of lands among the village merásidars, but what was termed the pasankarei or samudáyam tenure was adopted. According to this system periodical divisions were made, each sharer being bound to cultivate his share with a specified number of ploughs and labourers, while at harvest the gross produce of all the village lands was divided, after the revenue due to the State had been deducted. In many villages, however, these periodical allotments after a time ceased, and holdings were by mutual consent allowed to become permanent, the new system being called arudikarei or palabhógham. The shares in an arudikarei village were saleable, but co-merásidars had the right of pre-emption. This power of sale led in some instances to the gradual transfer of all the shares to one individual, and a village thus in the possession of a single person was styled as yékabhógam village. Instances of all these forms of tenure are still to be found in those parts of the district which border on Chingleput.

Besides the merásidars the village contained other cultivators called páyikáries. These were originally strangers to whom lands were leased out for cultivation by the village sharers, and many by long continued occupation and residence acquired a sort of right to possession being called ulkudi páyikáries, or permanent tenants, in contradistinction to parakudi páyikáries who only enjoyed a temporary right of occupancy.

Both paid, in addition to the revenue due to the State, a rent to the merásidars termed swánu bhógam or tundu váram.

Each village was of the nature of a small corporation, the affairs of which were managed by a headman with a staff of subordinate village servants remunerated by assignments of land, or mániams. The head vellálan, or monigar, who was without any remuneration in the shape of mániam, collected from the other merásidars the assessments payable to Government, and discharged the duties of judge and magistrate in petty matters. To keep the village accounts, to have charge of the village records, and to perform the duties of general scribe there was a kannakan who was assisted in some of the minor duties of his office by a nótagar or shroff. The talláry was the village constable, the toty the messenger of the village headman, and the nírganti distributed the water in customary proportions to the fields of the cultivators. The astrologer discharged duties imagined to be important, announcing the dates of religious feasts, and fixing the days propitious for domestic ceremonies, or agricultural operations. The smith and the carpenter constructed and repaired the instruments of husbandry which were used by the villagers, while the barber shaved them and dabbled in surgery. Besides these were the potter, the washerman, the cobbler, the goldsmith, and sometimes the snake doctor, the head shepherd, the head merchant or chetty, with several more of the kind. These were granted assignments of land, or tarabady mániems, and the right to collect 'méra,' or fees, in the shape of a certain number of handfuls of grain from each merásidar at the time of harvest.

The lands of the village were variously classed. That which was cultivated was divided into nanjah or irrigated, punjah or dry, and totakál or garden land; but this classification at first seems to have been constantly varying, the nanjah of one year becoming the punjah of the next, and perhaps the totakál of the succeeding season. With such variations in the character of the cultivation, the nature of the assessment due upon the land also changed, for while nanjah land was usually 'várapat,' or liable to a division of the produce, punjah and totakál were almost invariably 'tírvapat' or charged with a fixed rent not dependent upon the quantity of the produce. This distinction arose from the fact that the fate of nanjah crops was always more or less doubtful, and the risk of failure, from an insufficient supply of water, was therefore shared by the State with the cultivator, while punjah and totakál crops, being more free from such risks, the assessment imposed on them was fixed and unchanged. It was moreover usual to grow together on the same dry and garden land various descriptions of crops, each ripening at a different season, so that a division of the produce in such cases was both difficult and inconvenient.

For the village waste lands no assessment was paid. They were classed as 'poramboke' and 'tarasu,' the former including rocky, sterile soils, or lands reserved for public purposes, while the latter comprised all

lands cultivable, but not cultivated within the memory of man (anádhi karambu), or which had been cultivated, but abandoned, within that period (shéykal karambu).

The privileges of the village proprietors were first abridged by the Mahommedans. By them the assessments imposed upon the land were greatly increased, and eventually became so high that the páyikáries could not afford to pay their 'swánu bhógam' to the merásidars. These having no power to enforce the payment, gradually ceased to demand it. Losing their 'swánu bhógam' it became no longer worth their while to employ páyikáries, and they accordingly refused to allow these to cultivate, while at the same time they failed to cultivate the lands themselves. The waste lands were, under these circumstances, summarily confiscated by the Government, which granted them to tenants of its own, at first as a temporary measure, but the arrangement in course of time became permanent. The creed of the conquerors was that all land was the exclusive property of the State, and they scouted the idea that the merásidars enjoyed any rights which the páyikáries did not equally possess. Both were the tenants of the State, and the State was the landlord of all. Most of the distinctive features of the old system were in this manner gradually effaced, and the Collector of the district reported, soon after the cession of the Carnatic, that the merási system had no existence in North Arcot.[1]

The only class whose rights had been at all respected by the Mahommedans were the Brahmans. Their merási privileges were termed "swástiams" and continued a valuable and saleable property when all other lands were, in 1824, declared by the Collector to be absolutely unsaleable.

Though the Mahommedans are credited with having greatly increased the assessments of the country, the increase had been gradually introduced by their predecessors, part being announced as temporary. The Mahommedan Government, however, accepted and enforced the whole as a permanent charge.

The assessment according to Menu, and also according to the practice of the early Hindu Governments, was one-sixth of the produce under ordinary circumstances, but as much as one quarter in times of necessity, such as war. In the thirteenth century one of the Pándian kings introduced the novelty of demanding the sixth share separated from the husk, and this rate was generally adopted by subsequent Hindu

[1] In 1818 a further reference resulted in the Collector stating that heads of villages had certain merási rights. It had been usual on establishing a village to grant him lands called "grámattán mániam" and fees in kind called "sotantrums." The Mahommedan Government had respected this right, and allowed it to descend in the family, and to be transferred temporarily, or permanently, but for misdemeanour it was liable to resumption. All the rest of the land was, the Collector said, at the disposal of Government, and there was no idea that the grámattán was the proprietor of the village. In agraháras there was, however, a regular merási right which arose from a grant or "dána sásanum."

Governments until the extension of the Vijianagar power over the south, when the assessments levied by that Government from its subjects were introduced. These had been fixed by Vidiáraniya, the prime minister, at one-sixth for the king, one-thirtieth for Brahmans, one-twentieth for the gods, and the remainder to the proprietor. The share of the Brahmans and the gods was payable to the sovereign, who was charged with the duty of its distribution. This arrangement still left the merásidar with three-fourths of the gross produce, but after the subversion of the Vijianagar kingdom, when the country was distracted by constant war, a number of imposts, or temporary aids, were added, under the pretext of necessity, by the various local Governments, and the actual demand was increased to about one half of the produce. This enhanced demand was perpetuated by the Mahommedans, for their doctrine was that "the taking of a half is no more than strict justice and is not tyrannical, because as it is lawful to take the whole of the persons and property of infidels, and to distribute it among the Mussulmans, it follows that taking one half of their income is lawful *à fortiori*."

As the first political intercourse of the English was with Mahommedan rulers, and as Mahommedan institutions were those with which they had become familiar when the Carnatic was ceded after a long Mahommedan administration, it was not unnatural that the existing assessments and revenue arrangements should have been considered proper and suitable to the country, and accepted as a basis on which to fashion the Company's revenue system.

Mr. George Stratton was the first Collector of the Northern Division of Arcot. In making his first settlement of the revenues of the district he "resolved not to recede from the desirable object of introducing generally the system of village rents, constituting the head inhabitants of each village its renters, and making them jointly and severally responsible for the due performance of each other's engagements." This system, he observed, had been usual under the Nabob's Government, and would in his opinion secure to the ryots a just return for their labours. He seems, however, to have had some difficulty in persuading the villagers of this, for he complains of the "strong prejudice and diffidences of some against involving themselves in the responsibility of renters." We can hardly wonder at this, for Mr. Stratton drew a sad picture of the condition of the country, and commented upon the decline of the Government villages as compared with those held by inámdárs. Many of the former he described as utterly deserted, and the whole of their lands waste. To show to what an extent the rapacity of the Nabob's renters had been carried he stated that it was only in a few jaghire villages that the ryots got their full proportion of váram, while in Government villages sometimes the whole produce had been seized by the renter or the Nabob's servants. In others the cultivators received from one to three parts out of ten, instead of the

customary four or five. Their share in fact was often "only what they could conceal, or make away with."

The Board approved of Mr. Stratton's settlement by village rents, but expressed a desire to see established a "system where the proprietary inhabitants at large of each village enter into engagements with the Sircar, and derive a common and exclusive interest in the cultivation of their lands in proportion to their right of property." This was in fact the re-establishment of the old merási system, which had by this time been almost entirely destroyed during the administration of the Mahommedan Governments.

Notwithstanding this expression of the Board's wishes the settlement of Fasli 1212 was formed by Mr. Stratton on the same principle of village rents—a system which, he contended, possessed all the advantages of a ryotwary settlement, since he had, in consequence of complaints of improper exactions by the renters in the previous year, particularized in the rent puttah of each village the exact assessment they were entitled to "agreeable to the rates fixed many years before by Rajah Beerbur, commonly called Rayojee, who for many years managed the revenues of the Arcot Soubah, under the Nabob Wallajah." The "persevering obstinacy of the head villagers" had again forced him in some cases not to make the agreement with them, but to accept the tender of strangers. His prejudice in favour of the renting system had been strengthened, and he expressed his conviction that it afforded "the best means of attaining a knowledge of the resources of the country from frequent competition of interest." Eventually he hoped to see established "the system of permanent rents, which, by giving the landlords a property in the soil, stimulates their exertions in the hope of higher gain."

The following year's settlement was however ryotwary, for Mr. Stratton had meanwhile been succeeded by Mr. Cockburn, who was transferred from the district of Salem to the charge of the Northern Division of Arcot, the Báramahál, and the Bálaghát provinces. The result of the change of system was a considerable increase of revenue, in spite of an unfavourable season, owing to the discovery of unrecorded cultivation and a "truer ascertainment of the produce." The settlement was generally made after considering the average payments in money and grain by each ryot during the previous ten years. To the average money rents of dry lands during this series of years the Collector added certain extra assessments, which had for years been collected, and which he in another letter characterized as exactions. The average share of the produce of wet lands was commuted into a money payment, based upon the average prices ruling during the same period of ten years, but the nanjah revenue was increased by 15 per cent., as all méras paid to village officers were resumed, and one half added to the Government share. The results of this mode of settlement he was "induced to consider favourable to the increasing prosperity of the country, and at the same time the revenue is improved as well by a reduction of the expenses of

management, by receiving in money and not in kind, as by the effects produced in preventing the numerous frauds practised where payment in kind obtains."[1]

Mr. Cockburn's administration appears to have been disapproved of by Government, for the money collected on account of resumed méra was directed to be restored, and Mr. Cockburn was removed to the judicial line. His successor was Mr. Græme, a gentleman whose name is still gratefully remembered in this district as that of one who for fifteen years laboured to secure the well being of its inhabitants. He was as staunch an advocate for the ryotwary as Mr. Stratton had been for the permanent renting system, and his yearly administration reports contain forcible arguments in support of his views.

On October 14th, 1805, Mr. Græme submitted his report upon the settlement for Fasli 1214. As in the previous year, an individual settlement was effected with each ryot, and the assessments were every where collected in money alone. The accounts, however, exhibited a decrease of revenue, attributed to the disturbances among the Chittoor páliems, the failure of rain, the restoration of the assessments of resumed méras ? ordered by Government, and reductions in the rent of lands found to have been over-rated. His next settlement would, the Collector hoped, be based upon the results of a general survey of the district which would be completed within six months.

This general survey had been conducted in consequence of the orders of Government to Mr. Cockburn upon his transfer to this district. Mr. Cockburn, however, had only succeeded in completing the survey of the Báramahál ; that of the Northern Division of Arcot was for some reason delayed, and was eventually carried out by Mr. Græme. His accounts, known as the district pymaish, are valuable records, still carefully preserved and frequently referred to.[2]

---

[1] The Collector appended a statement showing the highest and lowest rates of assessment imposed by him in the various taluks for nanjah, punjah, and garden land. They varied very considerably, but taking the whole of the Northern Division the highest punjah rate was Rupees 15-15-6 in Tiruvallam, and the lowest Rupees 0-5-11$\frac{3}{4}$ in Cádapanattam. The highest rate for nanjah was Rupees 58 in Sátghur, and the lowest Rupees 0-15-0 in Ambúr. The highest garden rate was Rupees 70-15-9 in Kávéripák, and the lowest Rupees 1-1-2 in Venkatagirikóta. Thus the rate for garden lands was very much in excess of that for nanjah. The Collector remarked upon this, and recommended its reduction to the rates of ordinary cultivation—a proposal subsequently sanctioned by Government

[2] The original kadján pymaish accounts were unfortunately handed over to village curnams without signature or seal. Mahratta copies on coarse paper were kept in the Taluk Cutcherries, but these too were unsigned by the Collector, and were moreover full of erasures and blots. In 1825 Mr. Chamier, the Acting Collector, recalled all the curnams' copies, and had them compared with the Mahratta documents in the taluk offices. After being marked with the Collector's seal they were retained in the taluk, copies being made for the curnams, and for lodgment in the Collector's record-room.

Though the survey was fairly accurate, the classification and assessment of lands do not appear to have been just. For example wet lands under some small rain-fed tanks are found classed as double crop, whereas those in some villages served by the Kávéripák tank are entered as only single crop lands.

The work included both a general survey, and a classification, with assessment, of all lands. In the survey lands, both cultivated and waste, were divided into lots, each bearing a number, and the extent of each was recorded. A square having a side of 24 feet was taken as a gunta, one hundred of which composed a káni, which is equivalent to 1⅓ acre.

In the classification accounts each field was entered as nanjah, punjah, or totakál "according to its capabilities, and the nature of the cultivation which had been carried on upon it." In fixing the assessment the villages of each taluk were formed into three classes, according as their distance from market towns affected the selling price of grain, and the lands in each village were classed under four or more divisions. The third-class land of a first-class village was considered to be equal to the second-class land of a second-class village, and to the first-class land of a third-class village. The same rule of progression continued throughout the classes. The estimate of the produce of each class was then fixed,[1] and the ryot's share, being calculated, was reduced to a money equivalent.

In the case of nanjah land, méra was first deducted, but for other lands no such deduction was made. To give an example. In the Chittoor Taluk first-class nanjah, not under wells, in a first-class village was estimated to produce per káni 40 kallams. Deducting ryot's méra Ks. 1-4, the remainder Ks. 38-12 was divided between Government and the ryots, the Government share being converted into a money payment on the average of ten years' prices,[2] which in this case was S. P. 5-7-70 or Rupees 18-2-6 per káni.

The other classes of land were similarly treated, but the amount of méra deducted varied in different taluks, according to local usages, from

---

[1] It appears from the old hukumnáma that the produce of nanjah was fixed by inquiry into the character of the land, and the description and quantity of grain it had produced during some time past. The produce of totakál was settled from the accounts of its gross produce for twelve years, but for punjah merely an estimate was taken of how much the land would probably produce. It seems not unlikely that the records of produce were incorrect.

[2] The assessment of wet lands having been paid in grain, the prices taken were probably those recorded for Government sales of grain. But Government sales only took place when prices were high, so that the average was more or less against the ryot. For nanjah the prices during the Fasli years 1204 to 1215, inclusive, were taken (two high priced years, Faslis 1208 and 1214, being excluded), and the average of the ten remaining years was struck, the value of samba and navaray paddy being added together, and divided by two. For the better sorts of punjah the prices of rági and kambu were similarly treated, while for inferior sorts sámé, varagu, and gram were considered, but the details of the arrangement are not given, as they are in the case of nanjah.

Nanjah rates were made more favourable for villages situated at a distance from towns, but no such allowance was made for punjah lands; indeed the estimate for the latter seems to have been little more than arbitrary. There were no records of produce and price for punjah, and the directions given to the assessors were to consider the existing money assessment, and apparent fertility of the soil, but it is little more than a fiction to say that Mr. Græme's punjah settlement was a settlement according to the produce.

3⅛ to 6¼ per cent. The commutation rates also differed in different localities, and were from 112 to 163 measures per pagoda.[1]

An extra charge for a second nanjah crop was levied, at the rate of from 12 to 14 annas in the rupee of the assessment where the land lay under large tanks, and from 8 to 10 annas where it was irrigated by small ones. In assessing nanjah under wells, and punjah, no méra was deducted, and, since Government did not supply water, the ryot's share was two-thirds. The charge for a second crop on such lands was respectively 12 to 14 annas in the rupee for the former, and 8 annas in the rupee for the latter.

Garden lands were divided into from four to six classes, with a maximum assessment of Rupees 32-13-0, and a minimum of Rupees 6-2-0 per káni.

The average rates for lands in different taluks varied very considerably as exhibited in the following table:—

—	Maximum Taluk Average.	Minimum Taluk Average.
	RS. A. P.	RS. A. P.
Punjah	3 9 7½	2 8 7 1/16
Nanjah	19 11 5	10 6 9
Garden	21 15 1¼	7 5 9½

The average proportions in which the Government and ryots' shares stood for the whole district was nearly as follows:—

—	Government share.	Ryots' share.
Punjah	33·25 per cent.[2]	66·75 per cent.
Nanjah	46·75	53·25 ,,
Do. under wells ..	33·25	66·75
Garden land	25 ,,	75 ,,

The settlement of Fasli 1215 was made according to this principle. The average rates for nanjah and punjah were considerably less than they had been in Fasli 1213, but garden lands were charged at a higher rate than in that year. Notwithstanding the reduction in the demand per káni for nanjah and punjah, the total revenue for Fasli 1215 was considerably in excess of that for Fasli 1213, as unregistered cultivation was discovered during the survey, which bore an assessment of Star Pagodas 32,332, or upwards of a lakh of rupees. The Collector

[1] It is now impossible to ascertain the size of the measure taken by Mr. Græme, but it seems probable that it was one of 120 tolas, or 3 lb. weight, of horse gram.

[2] Except in Palmanér and Venkatagirikóta, where it was 50 per cent.

expressed his opinion that the ryots of the district paid collectively more than they had done before, but that each individual contributed a juster proportion.

The season of Fasli 1216 was a most unfavourable one. The rains had almost entirely failed throughout the district, and the distress of the people almost amounted to a famine. The settlement had been formed according to the survey rates, with but slight alterations in cases where errors had been discovered, but a large extent of land was reported to have been wholly unproductive, and the rest had produced a very unfavourable outturn. The Collector, however, made no remission whatever in partially productive lands, as he considered that "the loss in quantity would be compensated by the high price of grain, owing to the notorious scarcity." He had at first intended to remit altogether on lands reported to have been wholly unproductive, but finding the village accounts "so generally falsified, and detection so impossible" he levied a uniform rate of one half of the full assessment on punjah, and one third on nanjah "on those able to pay." In a subsequent letter to the Board he stated that he charged a higher proportion on punjah crops than on nanjah because the failure was not so great in the former as in the latter, and he explained his statement that these reduced rates were collected from "those able to pay" by saying that "the deficiencies of those who could not, were added to the first assessment of those who could." He had been led to this somewhat extraordinary arrangement by the conviction that were it to be discovered that those unable to meet the Government demand would be exempted from payment, it would have "led to hazard in the realization of the revenue. As it was, the necessity of a general assessment being once felt, soon brought matters to an issue." The revenue of the year showed a decrease on that of the previous fasli, but almost the whole demand had, upon the principles adopted by the Collector, been collected. The Board, on reviewing the Collector's arrangements, desired him to let it be clearly understood that any relaxation of the demand was to be "only temporary, and would be charged against the landholder within a limited period"— a policy especially illiberal, since the old division of nanjah crops had been superseded by a money payment, calculated at average prices, and consequently very unfavourable to nanjah cultivators in a disastrous season such as that of Fasli 1216.

On August 2nd, 1808, Mr. Græme reported upon his jamabundy for Fasli 1217. Abundant rain had fallen, but large bodies of cultivators had emigrated, and a great number of cattle had died during the previous fasli, so that the cultivation was not so extended as might have been expected. There was, however, an increase in the revenue as compared with Fasli 1216, though it exhibited a considerable decrease as compared with Fasli 1215. He reported that the survey might soon be considered complete, and that the assessment might be taken as fixed after the settlement of Fasli 1218.

In this year, 1808, the new distribution of the charges of Collectors was made, the object being to make the revenue and judicial jurisdictions in the country conformable. It was therefore arranged that, at the close of the fasli, the Venkatagiri and Sydápúr Zemindaries, hitherto under Mr. Græme's charge, should be transferred to the Collector of Nellore, while the Krishnagiri Division of the Báramahál was made over to the Collector of Salem. Instead of these the Northern Division of Arcot received the Satiavéd Taluk from the Chingleput District, and those taluks south of the Pálár, hitherto included in the Southern Division of Arcot, which had recently been transferred from the late Court at Arni to that of Chittoor. These were Tiruvettúr, Pólúr, Arcot, Vellore, and the Arni jaghire. As the southern taluks form an important portion of this district, as at present constituted, a brief account of their administration up to the date of their transfer may not be out of place.

Captain Graham had been appointed from the charge of the Krishnagiri Division, to that of the Southern Division of Arcot, upon the cession of the Carnatic. He was appointed on August 1st, 1801, and after a delay of nearly four months submitted his scheme for settling the district. It purported to be a village settlement, and the Collector had been induced to reduce the demand of the preceding years by about 30 per cent. in consequence of the well known oppression of the Nabob's managers, and the "necessity of a moderation adapted to the actual circumstances of the inhabitants, till gradual improvement, the effect of such moderation, should justify in the eye of policy an increased demand." That the principle, which Captain Graham thus upheld, was a necessary one was subsequently proved by the discovery that the continuation of the Mahommedan assessments was ruining the country, but the Board very justly remarked that though moderation was certainly desirable, it should not be extended merely to the village renters, but must be made to reach the cultivators as well, holding under those renters. Captain Graham's replies led the Board to imagine that the village settlement had been effected with the whole number of proprietary inhabitants, or merásidars of the village, and they accordingly approved of his reduction in the demand; but, when the details of the village settlement were submitted, they learned with surprise that, in direct contradiction to his reports, some villages had been individually rented out with joint securities for each other, some with specific securities for themselves alone, and some in farms of various and large extent, all indifferently let to persons of every description. A mass of inconsistencies were also discovered in the Collector's accounts, and Captain Graham was summoned to the Presidency to give a full explanation of his administration. Before the Board he stated that he had always given a preference to the heads of villagers in granting villages on rent, but where outsiders offered higher terms he had accepted them. He had generally assessed the villages at the rate of 14 rupees per plough, the rate under the Nabob's management having been 20 rupees. But the

Board pointed out that several villages actually destitute of inhabitants had been rented at considerable sums." Captain Graham could give no proper explanation, and his statements throughout his examination were so confused, that it was evident that he really knew little of the administration of his district. The accounts of the district were as confused as the Collector answers, and it was found "impossible to discover who were the persons under engagements to the Sircar." Captain Graham had "adopted an arrangement at once unusual and unreasonable, by which villages without any common interests were made severally and jointly responsible to an indefinite amount for the rents of the pergannah, if not the whole tahsildary." Numerous complaints from villagers had been presented to the Board, in which it was alleged that they dared not complain to the Collector owing to the notorious influence of the Peshkar, Laxman Row, over him. In one instance a complaint of certain inhabitants of Chétpat had been referred to the Collector for report. The Peshkar at once brought forward a pretended balance against the petitioners for Fasli 1210, and their grain was attached at his instigation. In scrutinizing the list of renters it was again abundantly clear that gross favouritism had prevailed. A mere Brinjári from the Báramahál had without competition been given villages, the rents of which amounted to nearly Rupees 2,10,000, and had received, also without competition, the lease of the customs of the Arcot Taluk at a reduction of 25 per cent. on the ground "that there were twenty-two roads by which goods could pass, though none of the twenty-two had been recently opened!" "It seemed clear," remarked the Board, "that gross fraud was prevalent, and that Laxman Row, the Peshkar, was the perpetrator." The public interests had suffered by a wanton sacrifice of one-fourth of the revenue, under a plea of indulgence to the oppressed inhabitants, while the nature of the settlement rendered impossible their reaping any advantage from it. His management "betrayed, by a perversion of the ordinary rules of prudence and precaution, a misapplication of time and general incompetency."

On September 30th, 1802, Captain Graham was accordingly removed and Mr. George Garrow, the Secretary of the Board of Revenue, was appointed to the charge of the division. Supported by the Board he at once raised the assessments of the district to the rates prevailing at the time of the cession of the country, "varying according to taluks, according to the mode of irrigation, and according to caste or tribe of the ryot, Mahommedans and Brahmans being allowed ten in the hundred more than Sudras." On the average the Government share amounted to 57 per cent. on the assumed produce, and this was commuted into money at the rate of 4 Ráyojee kallams to a pagoda. The heads of several villages promptly proceeded to the Presidency, and appealed to the Board, but were "peremptorily ordered to return to their country, and the peaceful pursuit of their occupations." With regard to the settlement of rents made by the Nabobs Mr. Garrow reported to the

Board that in his opinion it was not so much the amount of it that was considered oppressive, as the great inequality in its distribution among the villages. In his settlement he adopted Ráyojee's rates of assessment, and the revenue in Fasli 1210 "on nanjah cultivation in the several tahsildaries was the basis of the settlement. Calculating actual cultivation and average produce of the same for the last five years, and deducting méras, &c., a division of the remainder was made according to the rates hitherto allowed. The Sircar rate was commuted for money from a medium of highest and lowest rates."

For punjah lands Mr. Garrow also followed the rates of Fasli 1210, according to which money payments were general, though payments in grain existed in a few villages. The general result of his settlement was a great increase of revenue. He had, he said, made progress in ascertaining the value of the country, and hoped to be able to introduce a ryotwary settlement in Fasli 1213. A survey was very much needed, and he suggested that it might be sanctioned. The Board and Government of course approved of his suggestion, but the survey was postponed for years.

As might have been expected, the sudden withdrawal of the concessions granted by Captain Graham caused universal dissatisfaction through the district. Finding the Board obdurate, the aggrieved villagers appealed to the Government who, much to the regret of the Board, removed Mr. Garrow and appointed Major McLeod in January 1804.

In his first report upon the division Major McLeod announced his opinion that the assessment fixed by his predecessor had been very excessive; many families had deserted the district, and cattle were being sold at very reduced rates, showing the poverty to which the villagers had been reduced. He proposed, as a slight relief, taking the average money rent of the previous years, and applying it to the actual cultivation of the current fasli; but the Board were "concerned to learn the anticipated diminution in revenue," and remarking that the removal of Mr. Garrow had doubtless been considered as a presage of success by the schemers in the district, directed Major McLeod to carry out the settlement as commenced by his predecessor.

In support of his assertion that the Southern Division was over assessed Major McLeod in a subsequent letter compared the rates prevailing in the Northern and Southern Divisions of Arcot, and showed that although the more valuable nanjah and punjah lands bore a higher rate in the Northern Division than in the Southern, yet the average assessments in the latter were much higher than the average in the former, which proved that the poorer soils were too heavily taxed. He, therefore, made certain proposals for the reduction of the assessments where they were highest, but the Board declined to sanction them, and resolved to maintain existing rates until the completion of the projected survey.

Being thus opposed by the Board in all his attempts to mitigate the

severity of the assessment, Major McLeod appears to have lost interest in his work, and in March 1805 applied to be relieved of his appointment on the score of ill-health. The division was then placed under the management of Mr. Ravenshaw, with two Sub-Collectors, Messrs. Hyde and Ross. The latter had his head-quarters at Arcot, and was in charge of that portion of the district which was, in 1808, transferred to Mr. Græme.

Mr. Ravenshaw assumed charge of the district on April 4th, 1805, and prepared to conclude the settlement of the fasli. As he had been transferred from the very moderately rated district of Canara, he was struck by the severity of the land tax in his new division, and put the case so very strongly before the Board that they at last admitted that the inequality of the assessment was beyond a doubt. It appeared from Mr. Ravenshaw's report that the assessments of the Southern Division of Arcot were as follows:—

—	Maximum.	Minimum.	Average.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Nanjah[1]	51 13 0	2 1 9	14 11 4 3/5
Punjah	14 7 6	0 10 3 3/5	4 14 2 4/5
Garden	87 8 0	5 9 9	28 11 7 1/5

These figures showed such an unreasonable variation in rates that the Board recommended to Government that relief should be at once administered, without waiting for the completion of the survey, which had indeed not been commenced. Government in reply remarked that "the share of the produce taken by the Sircar had been excessive beyond

[1] Compare rates in the Northern Division.

—	Nanjah.				Punjah.				Garden.			
	Maximum.		Minimum.		Maximum.		Minimum.		Maximum.		Minimum.	
	Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	
Chittoor	38 13 4		1 11 9 1/2		8 5 11 1/2		0 6 6 4/5		34 11 4 2/5		2 14 3 1/5	
Satghur	58 0 0		4 0 0		14 8 0		0 10 0		46 8 0		3 6 0	
Kávéripák ..	42 10 6		4 6 0		5 4 0		1 5 0		70 15 9		3 8 0	
Tiruvallam ..	47 11 0		3 15 0		15 15 6		0 14 0		47 11 0		3 8 0	
Shólinghur ..	40 11 0		2 6 6		5 7 6		1 1 6		57 6 9		7 3 6	
Ambúr	38 3 6 3/5		0 15 0		12 1 0		0 9 0		57 1 4		6 4 0	
Cadapanattam ..	21 6 7 1/5		3 0 11		6 8 10 3/5		0 5 11 2/5		4 5 9		1 1 2 1/5	
Venkatagirikóta.	14 2 10 4/5		2 5 9 3/5		6 1 2 2/5		0 13 11		..		..	
Tirupati	..		..		..		..		..		..	
Total ..	301 10 10 3/5		22 12 11 4/5		74 4 1 1/5		6 1 11 2/5		318 11 11 2/5		27 12 11 2/5	
Average ..	37 11 4 1/5		2 13 7 1/5		9 4 6		0 12 3		45 8 7		3 15 7	
	Rs. 20-4-6				Rs. 5-0-4				Rs. 24-12-2			

all measure, and they hoped beyond all example, in any other part of the Company's territories." They directed that all vexatious extra cesses should be abolished, and that Mr. Ravenshaw should be directed to form his next settlement upon the basis of an equal division of the crop between Government and the ryot.

Mr. Ravenshaw, however, owing to the lateness of the season when these instructions reached him, was unable to adopt the principle of an equal division of the crop, but had applied as a measure of relief a reduction, sanctioned by the Board, of all nanjah and punjah rates to Rupees 17-8-0 and Rupees 7 per káni, respectively, when they exceeded those amounts. The result of this would be to give the ryot a quarter of the produce, which, Mr. Ravenshaw remarked, "is less by 25 per cent. than what he is entitled to, viz., 50 per cent." He gave some further instances of the oppressive nature of the assessment. He had found the gross produce of a field not equal to the amount of revenue due upon it. In many villages population and revenue had decreased 90 per cent. and "the poverty of the people was more general than the high assessment." It arose he considered from the rapacity of the heads of villages, who often extorted from the ryots double of the Government demand, and to remedy the evil he urged the introduction of a ryotwary system "which, by defining the specific sum due by each, was the sure means of checking this evil."

The survey of the sub-division was taken in hand by Mr. Ravenshaw in Fasli 1215, and was completed in the following year. After the completion of the survey, classification and assessment of the soils were commenced, but were not completed when the work was stopped by the introduction of the three years' lease.[1]

The scheme of assessment drawn up by Mr. Ravenshaw was this. He took as his standard land producing 100 kallams of grain.

From this he deducted in nanjah—

	K.	M.	A.
(1) Resumed sotuntrums, méras, &c., due to Government before division of crop ..	11	2	8
(2) Kalavasam due to ryot before division of crop	7	5	2
(3) Sotuntrums not resumed and due to ryot, &c.	2	11	6
	21	1	0
Balance of crop to be equally divided ..	78	5	0
Government share	39	2	8
Add to this sotuntrum due to Government ..	11	2	8
Government due	50	5	0

[1] The work was very hastily and carelessly done, at least in that part of the Southern Division which now forms portion of this district. The classification was chiefly left to curnams and monigars. The demand on the village being first settled, it was allotted among the fields according to curnams' and monigars' classification with a punchayet.

	Rs.	A.	P.
which commuted into money at 5 kallams per pagoda, and rejecting fractions amounted to	35	0	0

In punjah producing 100 kallams the following deductions were made before calculating the equal division of crop :—

	K.	M.	A.
Sotuntrums resumed by Government.. ..	1	0	8
Do. not resumed and due to ryot ..	1	11	12
	3	0	4
Produce to be divided	96	11	12
Government half share	48	5	14
Add resumed sotuntrums as above	1	0	8
Total ..	49	6	6

	Rs.	A.	P.
which converted into money at 5 kallams per pagoda very nearly amounted to	35	0	0

and by the addition of small sums, considered to be due to Government on account of " contingent charges " and village expenses, it was raised to this sum.

Having fixed these rates of commutation Mr. Ravenshaw drew up the following table of classification for land :—

Class.	Land producing per Káni.	Assessment.		
		Nanjah.	Garden.	Punjah.
	KALLAMS.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1	80	28 0 0	..	..
2	75	26 4 0	..	..
3	70	24 8 0	24 8 0	..
4	65	22 12 0	22 12 0	22 12 0
5	60	21 0 0	21 0 0	..
6	55	19 4 0	19 4 0	..
7	50	17 8 0	17 8 0	..
8	45	15 12 0	15 12 0	..
9	40	14 0 0	14 0 0	14 0 0
10	35	12 4 0	12 4 0	12 4 0
11	30	10 8 0	10 8 0	10 8 0
12	25	8 12 0	..	8 12 0
13	20	7 0 0	..	7 0 0
14	18	..	..	6 8 0
15	15	5 4 0	..	5 4 0
16	10	3 8 0	..	3 8 0
17	8	..	..	3 0 0
18	6	..	..	2 2 8
19	5	1 12 0	..	..
20	4	..	..	1 8 0

Thus there were 16 nanjah, 12 punjah, and 8 garden land rates, but the average rates in any village were not to exceed 5 pagodas (Rupees 17-8-0) for nanjah, and 2 pagodas (Rupees 7) for punjah per káni. In the case of lands held by Mahommedans and Brahmans a deduction,

at first of 5 per cent. and afterwards of 10 per cent. was allowed,[1] called teazgáry.

It will be observed that in making his settlement of rates Mr. Ravenshaw resumed in the case of nanjah lands almost the whole amount of méra or sotuntrums, due under the old Hindu system to the village merásidars, and in the case of punjah resumed about one half of it. In Mr. Græme's settlement, on the contrary, méra, &c., were included in the ryots' share, to be distributed by them. The value of these resumed méras in the southern taluks was formed into a fund for the remuneration of the village monigars, who collected the schists due by the ryots.

Mr. Ross, the subordinate Collector, stationed at Arcot, continued in charge of the southern taluks after their transfer to the Northern Division. The new district was at this time administered by the Collector, who had the whole of the taluks north of the Pálár, the Sub-Collector, having all those south of the river, and an Assistant who had no independent charge, but disposed of such work as the Collector handed over to him.

Very shortly after the reorganization of the districts the Board conceived a new system of settling the country by means of village rents. They had been led to this idea partly in consequence of the destruction, by the introduction of the survey, of the ancient usages of the country to "which the Hindus were proverbially attached," and partly because "the ryotwary system could with difficulty be brought to assimilate with the new judicial system." The settlement, the Board explained when unfolding their plans to Government, was to be concluded with the whole body of ryots collectively, and not with each specifically. In the recent surveys and assessments of the district it was evident that not merely méras, tundu váram, and other privileges of the merásidars were generally incorporated in the land revenues, but in many cases their gráma mániems were resumed. The pasankarei was forcibly converted into an arudikarei tenure, and they therefore proposed that Collectors, in forming the village leases, should be forbidden to enter into any engagement with persons "not entitled, by hereditary and prescriptive right, to pay direct to Government."

The Government evidently failed to comprehend the real object of the Board, which was the revival and encouragement of the merási system, for, while approving of village rents, they observed that "it does not appear necessary to forbid engagements with ryots not hitherto paying direct to Government."

The Board naturally apprehended that such a procedure would interfère with the rights of merásidars, but, before going more fully into

[1] This was objected to by Government in 1835. In 1837 notice was issued by the Collector that no teazgáry would be given for new lands brought under cultivation by Brahmans and Mahommedans, nor for lands left waste for any number of years. This partial concession was subsequently cancelled by Government.

the question, they resolved to call upon all Collectors for an expression of their views. After explaining the advantages of the system the Board proceeded, in their letter to Mr. Græme, to say "the change is calculated chiefly to diminish the detail of interference with the private concerns of the cultivators, to give an additional impulse to industry, to approximate, by means of this change, to the formation of estates on permanent rents, and especially to induce a greater facility of collection, and consequent reduction of charges on that account." Mr. Græme was violently opposed to the new plan, and argued strongly against its adoption. It would, he considered, sacrifice the interests of the ryots to those of the monigars, and it would close many of the existing sources of information regarding the resources and general condition of the country by cutting off the intercourse between Europeans and the majority of the population of the country. He predicted that the monigars would grind down the ryots, and allow them barely sufficient for mere subsistence, "and thus those who constitute the great strength of the country will be impoverished." Regarding the advisability of eventually forming permanent estates the Collector referred to his experiences of such estates in the Báramahál, and was assured that the remedy afforded by the Civil Courts was not sufficient to obviate the many evils of an abolition of the ryotwary settlement. A large number of cultivators would, he felt certain, gradually lose their independence by being reduced to the necessity of obtaining pecuniary assistance from the monigars, and even those who were not encumbered by such obligations would find it impossible to contest a suit, in which their rival could, by his personal influence, command the evidence of the majority of the dependent villagers. The monigar's influence would further result in the village accounts becoming unreliable, owing to the curnams being placed more than ever under the monigar's influence. "At least," urged Mr. Græme, "let the village settlement be deferred until the inequalities in the survey of the Northern Division be corrected, and until the survey of the newly transferred southern taluks be complete, so that the ryots may have some fixed rate to refer to when they have cause to complain." Should the Board still insist upon some form of village rent, Mr. Græme proposed a modification of their plan, by which the Collector should, in the early part of each year, fix the village rents with reference to the accounts of the previous year, and the state of the season. Upon the rent, thus fixed, he would allow the monigar and curnam a joint commission of from 10 to 12 per cent., "which is about 5 or 7 per cent. more than at present, but not more than they received in the Nabob's time till Fasli 1212 when my predecessor reduced it.[1]

[1] It appears from this letter of Mr. Græme that all the monigar, curnam, kável, and dasabandam inám lands, assumed by Mr. Cockburn, had not been restored, but that money payments, considerably less than the value of the land, had been made, so that monigars, since Fasli 1213, had paid rent for their mániem lands like other ryots.

On August 8th the Board replied to the Collector's objections, and expressed their trust "that most of the evils anticipated would be either wholly prevented, or materially alleviated, and that the benefits to be expected would outweigh these inconveniences." Their opinion regarding the objectionable character of the ryotwary settlement was shared by the Government, who considered that the system "involved a constant interference with the cultivators, and a continual exercise of that domiciliary control on the part of the officers of revenue, which it is the leading object of the permanent settlement to exclude."

Mr. Græme accordingly prepared to make a settlement with renters for three years, a term which had after some consideration been decided upon. According to the Board's instructions village merásidars were invariably to be given the precedence in granting the leases, and all renters were bound to give puttahs to the cultivating ryots at survey rates.

Mr. Græme at first had misapprehended the intentions of Government, and had contemplated a settlement with the head of the village or monigar alone. The mistake was perhaps natural, as the Board had distinctly expressed their object to be the formation of permanent estates. In December 14th, 1808, they explained that it was their particular desire that the settlement should be concluded with the whole of the occupant ryots, their object being the "a mere transition from ryotwary to village lease, without departing materially from the principles of the former system." The chief difference consisted in the extension of the settlement from one to three years, and the arrangement that the villagers should be jointly, as well as severally, responsible for the amount of the rent. Owing to the Collector's misapprehension of their directions, they feared that the settlement already in progress would not be so satisfactory as might be wished, and authorised him, should he think so, to postpone the introduction of the system until Fasli 1219.

Mr. Græme, however, did not avail himself of this permission, and the three years' rent was introduced in Fasli 1218. He reported the result on August 17th, 1809. In deciding the rent amount of each village within his division he had taken, as a general basis, the average of the five preceding faslis, as they comprehended a mixture of good and unfavourable seasons, but the general settlement was somewhat higher than the average thus obtained.

The settlement certainly appears very high, for it exceeded the average collection of the six preceding years by no less than Rupees 1,98,712. Each year's settlement was as follows:—

Fasli.	RS.	A.	P.
1218	22,24,249	3	$\frac{4}{5}$
1219	22,46,853	12	$9\frac{3}{5}$
1220	22,54,674	15	3
Average ..	22,41,925	14	$4\frac{1}{5}$

whereas the average collections for Fasli 1211 to 1217 had only been Rupees 20,43,212-14-10.

Of the effects of the new system the Collector expresses himself thus: "As far as it has proceeded collections have come in with tolerable regularity, but the season has been very favourable. A bad year would afford a more correct test of its efficiency. Frequent disputes have occurred between the ryots and renters, the one complaining of unjust demand, the other of unnecessary and evasive delay in the payment of rent; but such disputes are of course to be expected on the introduction of a new system, before the nature of the respective rights of the parties is marked and defined by precedents."

The rent system of the villages south of the Pálár was introduced by Mr. Ross, the subordinate Collector, who reported the result to Mr. Græme on May 7th, 1809. The settlement for the three years showed an increase in the yearly demand, as compared with that of the five previous faslis, of no less than 16½ per cent. for the whole of his division, though the rate of increase for the various taluks differed, being as much as 25¼ per cent. in the Tiruvettúr Taluk, described as possessing great local advantages in being well supplied with water from the Pálár and Chéyár rivers. In making his settlement Mr. Ross reported that he had "found it impossible to lay down any particular rule, further than the rule of moderation, by which all the villages should be settled." He preferred, therefore, after taking the accounts of each village separately, to examine the state of its population, whether the cultivation was carried on by Ulkudi or Parakudi ryots, what remissions had been made in previous rents, what expended on repairs, and generally to consider its advantages and disadvantages. "Each village has been settled separately, and as far as I can judge the mode has proved satisfactory to those concerned." He concluded by remarking upon the great inconvenience he had laboured under, from the want of a regular survey and assessment, especially in the Vellore Taluk, where the lands were most unequally assessed. It was however impossible to accomplish a survey during the continuation of the lease, as the curnams were entirely in the hands of those whose interests led them to concealment and fraud, and he suggested that, at the conclusion of the terms of the existing leases, two years should be devoted to the purpose of a regular classification, before any permanent settlement should be introduced.

Mr. Græme's next administration report is dated September 14th, 1811, when the village leases were nearly reaching their termination, and he had been enabled to form a juster estimate of their success. On this point he writes: "There have been many complaints made by ryots against renters for oppression, but upon the whole I do not think that this has been carried to any great extent; but this I consider to be in a great measure attributable to the circumscribed means of the renters, which have obliged them in many instances to receive, rather than to

impose, terms upon their under-tenants. However beneficial this may be to the ryots, it has perhaps prevented the renters from availing themselves of the whole resources of their villages, and obliged them to submit to a rent less than what they might reasonably have expected, did they possess capital sufficient to enable them to answer the Government demand, without being dependent upon the ryots for their immediate assistance." Under these circumstances the realization of the revenue could only be hoped for in favourable seasons, and unfortunately the season of Fasli 1219 was eminently unfavourable, and that of Fasli 1220 threatened to be the same. The rains of the former fasli had been "violent, unseasonable, and continued so long at a time as to do material and extensive damage to the crops." The outturn of the district was therefore much below the average, but prices had not risen in proportion, as there was still a large surplus of the very favourable seasons of Faslis 1217 and 1218 in the market. The prices at which renters were obliged to sell to merchants were on an average only half of the survey prices, and though the bazaar rates were higher, the majority of the renters could not avail themselves of these. There had therefore been great difficulty in collecting the revenue, and a recourse to distraint, and selling the property of very many renters and their securities had been found necessary. Mr. Græme was of opinion that at least Rupees 28,000 would certainly be irrecoverable for Fasli 1219, and that there would be an uncollected balance of no less than fourteen lakhs of rupees in the current fasli.

Having made these very disagreeable announcements, the Collector proceeded candidly to confess that his assessment of the district, made in Fasli 1215, was grievously excessive. In that year a large extent of unrecorded cultivation had been discovered and assessed. By lowering or equalising the rates upon recorded cultivation the Collector had imagined that the assessment, without being burdensome, would be more equally distributed, but by the experience of five years he had been persuaded that the district was over assessed to the amount of from Rupees 70,000 to Rupees 1,05,000, which almost equalled the amounts due upon the unrecorded cultivation.

It appeared clear to him that the cultivators had only been enabled to pay the exorbitant demands of the Nabob's Government by being in possession of inám land, or surreptitiously cultivating lands not brought to account. The advantages of inám lands had, however, been much curtailed under the management of the Company, and the unrecorded cultivation having been brought to account, it was impossible that the existing rates could be realised in any but the most favourable seasons. He, therefore, recommended a permanent reduction of Rupees 84,000 as "requisite to the interests of the inhabitants, and likely both to promote extension of cultivation, and to ensure the facility and regularity of the collections." In consequence of the comparative cheapness of grain in the current season he further recommended a

temporary remission of Rupees 91,000 in the two divisions of the district.

On July 25th, 1811, the Board announced the resolve of Government to continue the system of village leases for a still further period. Seven years was first proposed, but ten eventually decided upon, in order to give the system a fair trial. Mr. Græme was again very much opposed to the continuation of the system, and on August 7th wrote: "An extreme anxiety for the permanent welfare of the numerous body of inhabitants committed to my protection induces me to make another effort to secure their interests." He proposed that the settlement should be made directly with them, each cultivator being held answerable, in proportion to the extent of his holding, for the arrears of each individual ryot. This he considered would create a general excitement to personal exertion, and make the ryots mutually assist one another in cases of misfortunes. He proposed as the basis of his settlement the average collections of the past seven years.

In reply the Board of Revenue, on August 12th, expressed their willingness that the settlement should be effected with as many of the villagers as possible, but only doubted whether many might not be too poor to be eligible to take a part in the contract. One point they insisted upon, that the settlement should not be with each ryot, but with the whole body of renters for the whole farm, each renter being responsible for the full amount of the farm. The Collector was directed, in forming the settlement, to keep in mind the idea of a permanent settlement to be based upon it. The object of the lease was but to prepare the way for a permanent settlement, "to raise a superstructure only to be partially modified, and, by these means, also to afford the Collector the advantage of unembarrassed leisure for carrying the necessary modifications into effect." The basis proposed by Mr. Græme they considered too low, being Rupees 2,10,000 less than the settlement for Fasli 1220, and they thought that it should not fall short of the average of the three years' lease.

On September 7th Mr. Græme expressed his concern to find that the Board objected to the average collections of seven years being taken as the basis for the lease. It was true that the period included two years of extraordinary drought and famine, but what security, he asked, had the renters that such years would not recur. "Though the average collections of seven years falls so much short of the settlement of Fasli 1220, it is only Rupees 76,818 less than the collections of that fasli, and I am much afraid that the amount collected was more than it was expedient for the future interests of the country to collect, but, at the time of collecting, it was difficult to know this, or to act otherwise than try to bring in as much of the settlement as possible."

On August 14th, 1812, the Collector reported the particulars of his settlement for the ten years. The amounts for each year exclusive of peshcush were as follows :—

Fasli.	Rs.
1221 (1811-12)	13,60,918
1222 (1812-13)	16,43,133
1223 (1813-14)	16,60,242
1224 (1814-15)	16,68,128
1225 (1815-16)	16,70,413
1226 (1816-17)	16,72,132
1227 (1817-18)	16,72,377
1228 (1818-19)	16,72,394
1229 (1819-20)	16,72,758
1230 (1820-21)	16,75,376

The average was Rupees 1,89,595 less than the settlement of Fasli 1220, the last year of the triennial lease, but reductions had been necessary on account of the general poverty of the people, the cheapness of grain, emigration, and other circumstances. He had also taken into consideration the over assessment of Rupees 84,000 in Fasli 1215, but as the season of Fasli 1221 had been extremely bad, he found it impossible to make the settlement for that year upon the general basis proposed, and he had accordingly formed it with reference to the state of the season, and the exhausted condition of the renters. The total deduction, which he thus found it necessary to make, amounted to Rupees 2,75,031, which however he did not intend permanently to relinquish, but to apportion on the remaining years of the lease, so that the average of the ten years should equal that of the seven preceding.[1] Both Government and the Board approved of these arrangements, but the former considered that the permanent lease should be introduced as speedily as possible, for otherwise they apprehended that ryots might decrease their cultivation in order to secure better terms for themselves eventually. It was, therefore, directed that a clause should be inserted in the renters' agreements declaring that they should be permanent, if approved by Government, in all cases in which satisfactory terms had been offered "In the improbable case of the Honorable Court withholding their sanction to the settlement being rendered perpetual, it will at all events be binding on Government for ten years."

The season of Fasli 1222 was an indifferent one. Many of the renters lost heavily on their speculations, and it was with difficulty that the closing balances of the year were realised. Mr. Græme again expressed his opinion against the settlement. "I cannot," he wrote on March 19th, 1812, "deceive myself, and I should be unwilling to deceive the Government, by holding out the hope that the present amount of

[1] The Board subsequently, in 1815, declared that they had never sanctioned the Collector's proposal for 'shráyam,' or subsequent addition of temporary remission, and say that it is certainly at variance with the fundamental principles of the lease; they directed that from Fasli 1225 it should be discontinued, but did not propose a refund of past collections. Since nothing had been said regarding the 'shráyam' in the Board's original proceedings on the Collector's report, their censure of his action seems unjust.

demand, whether as applied to the village rent, or to a temporary or permanent ryotwari settlement, possesses any strong principle of production; that it contains the seed of any comprehensive improvement within the period of the lease, or perhaps within any given period." He urged the advisability of making a general reduction of 10 per cent., thus leaving a surplus to those "whose keen sense of interest would be likely to urge them to an early application of it to the general improvement of the country." The present demand, he felt assured, left little more than enough for bare subsistence, and would, in the event of a famine, produce enormous calamity.

The following years were, however, more favourable to the prospects of the lease, and in October 1815 Mr. Græme reported that the renters had on the whole certainly derived profits, and under a series of moderate years he had no doubt that the system would thrive.

The cherished scheme of Government and Board had, however, before this received a death blow from the Court of Directors in England, who expressed their surprise that the decennial lease should have been adopted in the face of repeated letters from home, in which the Court had expressed opinions unfavourable to that mode of settlement. In 1813 therefore Government issued orders that the ten years' lease should be announced as terminable.

In 1818 Mr. Græme left the district which he had so successfully administered for 15 years. Before leaving he recorded his opinion as to the amount of the eventual demand which Government should make. Though the Mahommedan accounts, he observed, went to show that the Company had been more moderate than their predecessors, those accounts could not be depended upon, and probably much which appeared in them was never collected, and never reached the treasury. The three years' lease was admittedly too high. The other leases were the average from 1211 to 1217, and the decennial lease which was fixed with reference to the former. With regard to the decennial lease, the years following Fasli 1221 were "favourable beyond the general expectations," and, were this state of affairs continued, the assessment might be considered moderate; but it was obviously impossible to count upon such an event. The reduction of 10 per cent. he had previously recommended would be "a real boon to the people, and worthy of the generosity of Government." Were it considered sufficient that the district should simply be stationary, a remission of from 3 to 4 per cent. was still, he considered, advisable, though a higher reduction of the Government demand was desirable. He pointed to the case of the decennial renters who had granted remissions of from 10 to 12 per cent. without injuring their aggregate collections, but on the contrary deriving considerable profit. A remission of 12 per cent., therefore, would probably not result in any positive or certain loss of revenue.

He then proceeded to defend the ryotwary system which had been unjustly charged as an organised system of oppression. "Specific acts

of severity, which it has been attempted to attach peculiarly and almost exclusively to the ryotwary, have been practised under every species of administration. * * Far from these evils having been introduced, or confirmed by the ryotwary they have been moderated and nearly exterminated, where the Collector has possessed those feelings for the welfare of the common ryots, for which I give credit to most of the Collectors who were early educated in an attachment to the revenue line, and particularly in a partiality for a system whose first inherent principle is to raise the low and to humble the great." Over assessment, he admitted, had made ryotwary settlements oppressive, but "the evil of over assessment has tainted every system, and I sincerely believe that the ryotwary, by exposing more details, by causing more direct and more constant communication between Collectors, and their inferior native officers, and the ryots, has more early led to the detection of it, and to the means of correcting it, and in practice to a more lenient enforcement of the Government dues. * * But leave the village lease to the operation of a permanent settlement, or a settlement, for a long duration, on the principle of the interference of revenue officers being unnecessary; withdraw the efficient revenue establishment, and leave the disputes between ryots to be determined entirely by distant tribunals, and it will end in the subjection of the ryots."

The term of the decennial lease closed in 1821, when Mr. Cooke reintroduced the ryotwary system. The Board, in submitting to Government Mr. Græme's letter, had given it as their opinion that a remission nearly equal to that proposed by the Collector was necessary to bring about an improvement in the district. "This sum will not be ultimately lost to the State. Actively stimulating the powerful principle of self interest among the agricultural body of the people, it will circulate in a thousand channels to the augmentation of stock, the extension of cultivation, and the increase of food and population throughout the country; and, annually accumulating in the hands of those whose local knowledge, pursuits, and personal interest render them best calculated to expend it with benefit to the country, it will bring home to each inhabitant of these provinces advantages at present unknown, while it may again be drawn into the coffers of the State by raising the assessment to its present amount, so soon as the increased wealth and prosperity of the people shall have rendered that measure compatible with a continuance of progressive improvement." The result of these appeals was the approval by Government of the reduction of 12 per cent. recommended by Mr. Græme, and though the remissions allowed by Mr. Cooke were generally in excess of this, the revenue of Fasli 1230 did not fall off proportionately, as the favourable character of the season led to extended cultivation. The average remissions were :—

On punjah	14⅛ per cent.
,, nanjah	10¾ do.
,, garden lands	6¼ do.

but it varied in different taluks and villages. In Chittoor it was as much as 20¾ per cent., but in Arcot not more than 8¼ per cent., while in some villages it reached 50 per cent. The Board, however, disapproved of these discriminate remissions, and considered that the 12 per cent. reduction should be applied to the rates fixed by Mr. Græme in 1805, as those were settled by an experienced officer, after some years of ryotwary experience, whereas now, after a long series of years of leasing, the Revenue officers had, as found by the Sub-Collector Mr. Chamier, lost much of their Revenue experience. They directed, therefore, that a uniform and equal remission of 12 per cent. should be made on all assessments, instead of continuing the "arbitrary and undefined mode in which the reduction of Fasli 1231 was made." In this view the Government concurred, remarking that "any inequalities in the assessment were probably the result of different degrees of industry and capital employed, or were those accidental ones to which all settlements are liable."

These instructions arrived too late to allow of the system being introduced in Fasli 1232, but in the following year a uniform reduction of 12½ per cent., or 2 annas in the rupee, was allowed. This proportion was chosen for the sake of its convenience in calculating the remission on each puttah.

The result of these concessions was, however, not such as was expected. The revenue continued to decrease—a circumstance attributed to the bad character of the seasons following the decennial lease. The season of Fasli 1233 was very disastrous. Many cattle had died, and ryots had emigrated in great numbers. The succeeding year was marked by inadequate and untimely rains. Though Fasli 1235 was more favourable, much land was left waste for want of persons to cultivate it; but Fasli 1236 was unusually favourable, and the revenue rose very considerably.

In 1829 the Collector, Mr. Nisbet, expressed his opinion that the assessment was still too high, and recommended a further reduction of 6¼ per cent. in the northern taluks and 10 per cent. in the southern, not to be applied uniformly, but discriminately as in Fasli 1231, according to the degree of over assessment in different taluks or villages. The pymaish rates he pronounced to be most unequal, and he proposed to correct them by giving remission up to 20 per cent. in some cases, and less in others, the average on the whole being brought up to 18¾.

He compared the average wet and dry assessments of this district with those of the neighbouring district of Chingleput.

—	North Arcot.	Chingleput.
	Rs. A. P.	Rs. A. P.
Dry	3 8 0	1 0 0
Wet	11 12 0	4 5 5

A general revision of the assessment was, Mr. Nisbet considered, urgently needed, and for this purpose he asked for a Special Assistant. A similar measure had been urged for the southern taluks by Mr. H. Chamier, the Sub-Collector, immediately after the reintroduction of ryotwary system in 1822. The survey of these taluks had originally been made in a very imperfect manner. Only cultivated land had been surveyed, the inám and waste lands being left untouched. Even the measurements of cultivated lands were very roughly calculated, not by fields, but in extensive blocks, including nullas, hillocks, and roads, and the consequence was that in many cases the accounts exhibited larger extents of land than ryots actually held.[1] Fields were unnumbered, and undefined by any particular marks, so that it was almost impossible to identify them. During the periods of the leases, the Curnams and renters had taken advantage of these ambiguities in the accounts, and had altered the classification of many fields, representing much of the best land to be of a low class, and raising inferior lands to a high class with the natural result of throwing the latter out of cultivation. Disputes regarding boundaries were of frequent occurrence, and a resurvey was, in Mr. Chamier's opinion, necessary "not only for the security of the revenue, but for the security of the peace, and prevention of litigation."

On May 17th, 1822, the resurvey was sanctioned. It began in Fasli 1233, but its progress was repeatedly delayed. The direction of the Board that the standard should be such as could be readily converted into acres, led to the necessity of altering all the measuring chains from 24 to 33 feet. When this alteration was effected the unfavourable season of Fasli 1233 occurred, and the work was impeded owing to the number of cultivators who had deserted from the southern taluks. In many places indeed it had to be stopped altogether until the proprietors returned. The work was resumed in Fasli 1236, and carried on to a considerable extent by Mr. Nisbet until he left the district. As far as it went it was a carefully executed piece of work. After the assessment was revised by the Collector's Cutcherry it was submitted to punchayets, and their objections were inquired into and disposed of. Every ryot was given an opportunity of pointing out how he was aggrieved, and

---

[1] On October 23rd, 1854, Mr. Bourdillon gave two examples of this, viz., the villages of Chakramalúr and Mandiálum in the Arcot Taluk. "In the former out of an extent of Kánis 229 of wet land, shown in the accounts, there is no more in reality than 182, leaving a deficiency of Kánis 47, or 20 per cent. The assessment on the deficient land amounts to about Rupees 650. In Mandiálum there is a deficiency of Kánis 40, out of Kánis 167, or 23¾ per cent., and the assessment of the deficient land is about Rupees 500. If the whole of the land were cultivated these large sums would have to be paid over and above the nominal assessment."

It appears from a report of Mr. Garrow that the South Arcot gunta was really one having a side of 23 feet, as Rayojee measured it by 24 feet of the tallest man in the district, and threw in 2 feet for charity. Twenty-six of these feet = 23 English feet.

Mr. Nisbet said that he "had ultimately the satisfaction of receiving the assurance of every ryot who took his puttah that he was satisfied." His successor, Mr. Roberts, reported on October 25th, 1827, that the measurement of 988 villages had been completed, the assessment settled in 954, and ajmaish in 739; but he recommended a reduction of 10 per cent. on Mr. Nisbet's rates, and discontinued the survey until orders upon his recommendation should be passed. Mr. Nisbet's rates he pointed out were far higher than those in the Ceded Districts, and in some cases 25 per cent. higher than those fixed by Mr. Ravenshaw. He also criticised Mr. Græme's settlement of the northern taluks, pointing out several flaws in it. Taking one village as an example, he showed that the renters during the period of the leases had remitted upwards of 30 per cent. on the assessment of the highest class two crop wet lands. All first class one crop land had been waste since Fasli 1233, and most of the first and second class two crop lands. He recommended a further reduction of 6 per cent. as necessary for the "reciprocal welfare of Government and ryots," and spoke of the "melancholy distress of the ryots, and the very deteriorated state of the country, in comparison with its former prosperity."

It was not until 1830 that the Board found leisure to consider Mr. Roberts' reports. In that year they called for a large number of survey records, and recorded their opinion that the Collector had proceeded on entirely wrong principles in revising his predecessor's assessments. He had not proved the ill-effects of the discriminate remission, his plans were "crude and undigested, his schemes founded on no definite principle, and palpably inexpedient," and they submitted to Government the question whether it was advisable, under these circumstances, to entrust the completion of the work to Mr. Roberts. Government replied, in 1832, that Mr. Roberts would be moved to another department, and that as the survey and assessment required much local experience the question of reassessment had better stand over. And so the subject dropped for a time.

On February 16th, 1838, Mr. J. D. Bourdillon, then Sub-Collector, brought to notice the fact that a very large extent of the best land in the southern taluks remained waste. The revenues of the Southern Division had, he said, regularly diminished since the Company had been in charge of them. The extents of wet land cultivated had increased, but all the more highly assessed fields had been abandoned. There had been a steady decrease in the revenues of both northern and southern taluks, the difference in the northern taluks between Fasli 1215 and the average of Faslis 1245, 6 and 7 being in—

	Rs.	
Nanjah	80,000	and odd.
Punjah	70,000	,,
Totakál	1,20,000	,,

In the southern taluks there were no accounts before the lease, but the difference between Fasli 1232 and the average of Faslis 1245, 6 and 7 was in—

	Rs.
Nanjah	1,70,900
Punjah	5,361
Totakál	9,710

He attributed this mainly to the fact that there was in the southern taluks no distinction between the charge for one and two crops on wet land, as there was in the northern. "The highest class lands were probably assessed for two crops and the lowest for one, but this cannot be now distinguished, and so remission cannot be given when second crop is not cultivated. Hence the higher class land is given up, and the lower class cultivated with two crops without any extra charge." He proposed that the assessment should be divided between the crops, two-thirds being assessed upon the first, and one-third upon the second. But even this would not bring under cultivation the most highly rated fields, for which a reduction of assessment was urgently needed. They had never been cultivated, except during the times of the leases. After the conclusion of the decennial lease a remission of about 9½ per cent. was allowed in Fasli 1231, and 8¾ per cent. in Fasli 1232, but was discontinued in and after Fasli 1233 in consequence of the survey.

The Collector, Mr. Ogilvie, however, raised objections to Mr. Bourdillon's proposed treatment of a second crop on wet land, on the ground that the survey accounts did not distinguish between one and two crop land, and he recommended that the best remedy for the declining prosperity of the southern taluks was the completion and introduction of Mr. Nisbet's survey, which had been partially completed. The assessment would produce an increase, but deducting 10 per cent., as recommended by Mr. Roberts, there would be a slight general remission in favour of the ryots, and he strongly urged the advisability of completing, and introducing the survey with the 10 per cent. remission. Still nothing was done, though in 1840 the Board promised to submit their "matured sentiments to Government at an early date." Early in 1842 Mr. Bourdillon succeeded to the charge of the district, and on September 3rd he again brought the subject to notice; but the Board delayed giving their sanction, as the best mode of conducting a survey was still under consideration. In 1853 Mr. Brett recommended the completion of the survey, as in his opinion the inequalities of that of Fasli 1215 were the chief causes of the decline of revenue in the southern taluks. In the succeeding year Mr. Bourdillon, the Collector, received orders from the Board to give immediate relief in cases where "the excessive pressure of the assessment has tended to keep valuable lands permanently out of cultivation, and to frame a scheme for a more general and systematic revision of the reduction of assessment."

Mr. Bourdillon was in this year removed to a seat in the Board, but before leaving the district he submitted his proposals in a letter, dated October 23rd, 1854. For affording immediate relief he had dealt with whole classes of land in order to avoid delay—an arrangement which in some cases led to the grant of remission to cultivated lands, and in others to the withholding of relief to fields which were waste; but on the whole great relief was afforded, until the more complete measure was matured. But little relief was granted to the northern taluks, owing to the greater industry of the ryots and the division of the assessment between two crops. Of the result of his arrangements he wrote: "About Rupees 18,000 of present revenue is given up, but in return there is the reasonable prospect of a large accession of revenue from the waste land subjected to the reduction. The total assessment charged on that land, at the reduced rates, is Rupees 1,80,579, being just ten times the amount of revenue now given up. The whole of the land is now waste and unproductive, and supposing that only half of it is brought under cultivation as a consequence of the present reductions, there will be an increase of Rupees 90,000 to set off against the loss of Rupees 18,000." To meet the complaints of deficiency in holdings in the southern taluks, Mr. Bourdillon ordered that Mr. Nisbet's survey should be adopted, in all villages in which it was complete, in the settlement of the current year. "This measure will remove a standing grievance and a great deal of discontent."

As to the more general and systematic revision of the assessment, he remarked that "even assuming the quantity of produce, and the commutation rate as fair, the burden of assessment has been increased by the subsequent fall in the prices of grain." Excluding the taluks about the ghauts, where it was less, this fall varied from 17 to 60 per cent. and was "not natural, resulting from the cheapening of the processes of agriculture, or from a lowering of the cost of bringing grain to market through improvement of roads, or from increased skill obtaining heavier crops, but rather from the non-increasing, and even diminishing demand of the non-agricultural classes, and partly from the increase in the value of silver." Not only was this disastrous to the ryot, but also to Government, for the revenues of many villages had fallen to a half, or even a third, of what they formerly were. "Whether we look to the north or south a reduction of the assessment is certainly necessary. We find extensive tracts of land waste, including much of the very best quality, especially in the southern taluks, and the chief cause certainly is the heavy pressure of the Government tax; and though the fact that the assessment is so heavy as to keep land out of cultivation, is a proof that it ought to be reduced, the converse is far from being true, that where land is cultivated the assessment must be moderate. There are villages in which the owners of the land have become so utterly impoverished, that their whole land is mortgaged, and they now cultivate for mortgagees who allow them just sufficient to maintain them. In very

many other cases the ryots have contracted their holdings to what is just enough to give them the means of living, and cultivate that, less for profit, than because they must do so or starve, no other means being open to them to gain a livelihood."

As to the extent of reduction, he gave it as his opinion that 5 pagodas per káni for two crops was "as much as could be paid regularly, on good land, well provided with irrigation, and not remote from a market, if the owner is to receive more than a mere subsistence," but, to be on the safe side, suggested that the highest rate for one crop should be Rupees 10, with an extra charge of Rupees 6-4-0 for a second crop. A total reduction of 30 per cent. all over the district was necessary on both cultivated and waste, this being an addition to the 12 per cent. already allowed in the northern taluks. The reduction was to be greater in the south than in the north, the difference being, however, partly equalised by the abolition of the teazgáry remission, and the imposition of a second crop assessment in some cases. In no cases would less than 10 per cent. be deducted, so that thus the teazgáry would disappear.

The punjah rates were more moderate, but the average cultivation of the last ten years was only one-third of the whole. Taking the cultivation of Fasli 1262, the average assessment on the cultivated dry lands was Rupees 2-4-5 in the northern, and Rupees 2-13-3 in the southern taluks, whereas in other districts it was—

	RS.	A.	P.
In Bellary	0	14	7
,, Cuddapah	1	1	0
,, Coimbatore	1	0	6
,, Salem	1	13	8
,, Madura	1	12	5
,, Tanjore	1	8	10

He proposed a reduction of 15 per cent., which would bring the average for North Arcot down to Rupees 1-14-0. That the temporary loss of revenue would be speedily made good seemed clear from the fact that already the rumour of the intended reductions had had the effect of causing much waste land to be ploughed, even in that year of drought, simply to secure an interest in it. "But even if there were less certainty that the changes proposed would result in gain instead of loss, I should still urge them. Revenue is not the only consideration. The Government of a great country is not conducted wholly on the same principles as a mercantile concern. The happiness and comfort, the peaceableness and contentment of the people are also items in the account, and in the present case they will add largely to the profits of the venture. I have no hesitation in saying that the changes now advocated, if carried into effect, will spread joy and lightness of heart through the length and breadth of this province. And not only that. It may fairly be expected that the increased demand for labour, and its consequent better remuneration, will have the effect of reclaiming to industrious and orderly

habits, classes who now live in a great measure by plunder, and are a pest to society." Finally, Mr. Bourdillon recommended that an instalment should be given in the form of a percentage remission.

The Board, of which Mr. Bourdillon was now a member, approved of his proposal, and recommended a temporary reduction, until the scheme was worked out, of 25 per cent. (excluding the 12½ per cent. already allowed) on all lands in the Chittoor, Chandragiri, Tiruvallam and Sátghur Taluks, and in other taluks 12½ per cent. on all lands, but 18¾ on nanjah and totakál bearing a higher assessment than Rupees 14. Government approved of these proposals, Mr. Bourdillon being then Secretary, and signing their proceedings.

As extra European aid was required to carry out the scheme for revising the assessment, Mr. George Banbury was, in 1855, appointed as an Additional Sub-Collector for that purpose. In June 1856 his proposals for the northern taluks were ready. Wet assessments from Rupees 19-11-5 to Rupees 17-9-9 were brought down to Rupees 10, and similar reductions made for lower classes and for dry lands.

The rates were as follows :—

Class.	Punjah.	Nanjah.	Class.	Punjah.	Nanjah.
	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
1	6 0 0	10 0 0	11	2 0 0	5 0 0
2	5 0 0	9 8 0	12	1 12 0	4 8 0
3	4 0 0	9 0 0	13	1 8 0	4 0 0
4	3 12 0	8 8 0	14	1 4 0	3 8 0
5	3 8 0	8 0 0	15	1 0 0	3 0 0
6	3 4 0	7 8 0	16	0 12 0	2 8 0
7	3 0 0	7 0 0	17	0 8 0	2 0 0
8	2 12 0	6 8 0	18	0 4 0	1 8 0
9	2 8 0	6 0 0	19	0 3 0	1 0 0
10	2 4 0	5 8 0	20	..	0 8 0

The first and second class of punjah consisted of garden lands irrigated by wells, or Mánavári lands, that is lands so low as to yield rice crops by aid of rain alone. The nanjah rates were for a single crop, 50 per cent. extra being charged for a second crop. The number of wet rates were by these means reduced from 141 to 20, and dry rates from 55 to 19. Eventually the three lowest wet assessments were raised to Rupees 2, which is now the smallest sum paid for a káni of nanjah.

In the southern taluks it was found difficult to adopt Mr. Nisbet's classification as proposed by Mr. Bourdillon, and to separate double and single crop lands. Mr. Banbury, therefore, ascertained all the old rates, reduced the highest most, and grouped several into one. The highest charge for double crop wet land was Rupees 15, except in Pólúr and Wandiwash, which were more needy taluks, and in which the assessments were made one step lower, the highest double crop rates being Rupees 14. There were 30 wet rates, varying from Rupees 15 to 2, and 37 dry rates, varying from Rupees 6 to Annas 3. The total sacrifice of revenue for the

whole district was upon wet land Rupees 3,44,794, and on dry Rupees 1,28,868. As there were Kánis 66,479 of wet newly assessed at Rupees 5,09,930, and Kánis 343,964 of dry newly assessed at Rupees 5,79,690, still waste, it seemed probable that the temporary loss of four and-a-half lakhs would in a few years be made good.

The results of this measure are best shown by a statement of the average land revenue during quinquennial periods prior and subsequent to its introduction.

Average Land Revenue.			
Before.		After.	
	Rs.		Rs.
Fasli 1250–54 (1840–44) ..	15,61,893	Fasli 1265–69 (1855–59) ..	16,19,513
,, 1255–59 (1845–49) ..	15,71,917	,, 1270–74 (1860–64) ..	17,01,548
,, 1260–64 (1850–54) ..	15,56,946	,, 1275–79 (1865–69) ..	16,22,822 [1]

In 1864 Mr. J. D. Robinson obtained sanction to allow a small further reduction upon the assessment of waste lands newly brought under the plough, the minimum assessment still being Rupees 2 for wet, and Annas 3 for dry lands. The reductions were arranged thus :—

Northern Taluks.

Wet assessments between		Rs.	10	0	and Rs.	8	0	reduced to Rs.	8 0
Do.	do.	,,	8	0	,,	5	0	do.	5 0
Do.	do.	,,	5	0	,,	3	0	do.	3 0
Do.	do.	,,	3	0	,,	2	0	do.	2 0
Dry	do.	,,	6	0	,,	3	8	do.	3 8
Do.	do.	,,	3	8	,,	2	0	do.	2 0
Do.	do.	,,	2	0	,,	1	0	do.	1 0
Do.	do.	,,	1	0	,,	0	8	do.	0 8
Do.	do.	,,	0	8	,,	0	4	do.	0 4

Southern Taluks.

Wet assessments between		Rs.	15	0	and Rs.	11	0	reduced to Rs.	11 0
Do.	do.	,,	11	0	,,	6	8	do.	6 8
Do.	do.	,,	6	8	,,	4	4	do.	4 4
Do.	do.	,,	4	4	,,	3	4	do.	3 4

Dry assessments as in the northern taluks.

These are now known as the table rates.

The enormous rise in the value of agricultural produce since the revision of 1857 has made the assessments of the district comparatively light, and an enhancement of the Government demand would probably now have little effect upon the area of land cultivated. Some of the poor soils, which are really not worth the trouble of cultivation, might be

[1] This includes the period of the famine of 1866.

relinquished, but the revenue derived from them is insignificant, and ryots could afford to pay higher assessments, and yet derive large profit from their labour. In the settled estates the amounts paid by the cultivators without difficulty, are enormously in excess of those demanded for precisely similar lands in Government taluks.

Wells.—At the time of the survey, 1805, all wells seem to have been regarded as the property of Government, and to have been entered as a Government source of irrigation, the ryots' share of the produce raised under them being taken as two-thirds. The result was that the number of wells did not increase until, within a few years, the Collector granted dry lands on permanent dry rates to ryots who sunk wells, and raised wet or garden crops. By this means nearly 2,500 acres were, by 1814, newly brought under such cultivation. The assessment upon lands under old wells however was continued until 1854, the rates being in—

Northern Division,	maximum	Rs.	38	8	minimum	Rs.	5 4
Southern do.	do.	,,	52	8	do.	,,	5 4

the latter being a consolidated double crop charge.

In 1854 the rates were reduced to—

Northern Division,	maximum	Rs.	15	12	minimum	Rs.	3 8
Southern do.	do.	,,	17	8	do.	,,	3 8

and in 1857 Rupees 6 was made the highest charge throughout the district.

Pattadapáchal, or well nanjah, was originally assessed very heavily, the highest rates in the northern and southern taluks being Rupees 16-13-6, and Rupees 35-5-3 (for double crop) respectively. At the revision of the assessments these rates were reduced to Rupees 8-8-0 in the one case, and Rupees 13 in the other, but Government considered that further relief should be extended to these remote investments of capital, and ordered that no charge should be made for a second crop. The order could not be carried out in the southern taluks, and even in the northern ones it was taken to apply only to modern wells, or to old ones clearly proved to be the property of the ryot, which virtually excluded all old wells. In 1865 Mr. Robinson recommended the transfer of all well nanjah to the highest punjah rate (Rupees 6), except where the wells were situated in the bed of a tank, or in wet lands which were their *raison d'être*, and they were merely ancilliary sources of irrigation. This was approved, with the proviso that in special cases tank bed wells might be recommended for favourable treatment.

Garden Lands or Totakál.—At the time of pymaish the ryots' share of the produce of lands carrying a garden crop was fixed at 75 per cent., but this made the assessments very heavy, and they went as high as Rupees 49 per káni, or Rupees 36 per acre, with the result of almost all the highest classes being left waste. In 1854 it was found that 72 per cent. of lands bearing an assessment above Rupees 31-8-0, and 63 per cent. of those above Rupees 21, were waste. Temporary relief was

granted in 1854, and in 1857, lands under tanks and channels were classed as nanjah, while others were brought under the higher punjah rates.

Dasabandam.—The Mahommedan Government of the Carnatic very generally granted a portion of the irrigated area under tanks and channels, upon what was termed a dasabandam tenure, particularly in the Chittoor and Chandragiri Taluks. By this the burden of keeping those sources of irrigation in repair was transferred to the dasabandam inámdar, who was granted, originally a tenth of the ayacut, but latterly more. After the cession this arrangement was extended, and a quarter of the ayacut under tanks, or a fifth under channels, was the amount allowed, a proportional charge being imposed on the inám in the event of the cultivation falling short. In 1817 the rules were applied to those who undertook the construction of new tanks or channels, but little advantage appears to have been taken of the concession. The system was abandoned in 1844, and many ináms have since then been gradually resumed, upon default of the inámdars to fulfil the conditions of the grant. At present there are in the Government taluks of the district 885 tanks, 52 river channels, 33 spring channels, 10 kondams (anicuts), and 337 wells held under this tenure.

Village Servants.—The number of these found at the cession was very great, including many now obsolete, such as the snake-doctor, head shepherd, head and assistant merchant, and others. They were remunerated by mániams and méra. The former were grants of land of two kinds, tarabadi, and dámáshai. The first consisted of a definite grant of land, and the other of one-eleventh part of the village cultivation, except garden lands. These were divided, in certain proportions, among the various village servants. Méra was likewise of two kinds, aravadi méra, and tundu káni méra. The former was very simple. The méra dittam account of the village showed how many merkals of grain were due to village servants on each káni cultivated, and the amount was commuted at rates fixed in 1805. The latter was of a very complicated nature, and it is difficult to conceive how it originated. It was calculated thus. The nanjah beriz was ascertained, and converted into grain at 8 kallams to the pagoda, *i.e.*, at nearly double the commutation rate. The quotient was divided by from 30 to 40, being the supposed number of merkals produced on a káni in different villages, and on the amount, taken as kánis, the méra was calculated according to the old méra dittam account.

In 1803 the Collectors of both the Northern and Southern Divisions of Arcot resumed all these emoluments, but the new arrangements made in the two districts differed. Mr. Cockburn at first resumed both the lands and méras of monigars and curnams in Tiruvallam, Shólinghur, and Venkatagirikóta, but in Chittoor, Tirupati, Sátghur, and Cadapanattam left them their mániem lands. Talláries he left as he found them, and others, except nótagars, he charged with one quarter of the assessment of their inám lands. In 1806 the monigars and curnams of

Chittoor and Tirupati shared the fate of those in the less fortunate taluks, as in 1808 did those in the remainder of the Northern Division. Their remunerations were paid in money according to a fixed scale, depending upon the revenue of the village. Nótagars were given no emoluments at all. Mr. Garrow in the Southern Division resumed the mániams and méras of monigars, and curnams, and nótagars, but only the méras of talláries, and reduced the extent of rent free lands held by smiths, carpenters, and others to half a káni of nanjah, and as much of punjah. Monigars, curnams, and nótagars received a money payment.

These arrangements were disapproved of by Government, who ordered the restoration of the resumed privileges, but the order was not obeyed until 1826, when all were restored except in the Chittoor Taluk, where, owing to the lax administration of Abdul Wahâb, monigars had in some cases appropriated mániem lands assessed at more than Rupees 1,200 a year. After inquiry part of these was restored, and the rest resumed. The value of the lands given back was altogether Rupees 2,13,212 on cultivated, and Rupees 34,865 on waste, while the money payments discontinued aggregated Rupees 1,27,422, the loss of Government being therefore Rupees 1,20,655.

Moturfa.—This tax appears to have been a remnant of the old mouzwár, or village lease system, under which the lessees were under no fixed rules as to the classes from whom, or the property on which, the amount of their leases should be levied. The Company continued to collect the tax at the rates that had been in force under the Nabob. Shepherds, painters of chintz, bricklayers, and the owners of shops, looms, oil-mills, furnaces, indigo vats, &c., were liable, but upon no fixed principle. In no place except Arcot did bricklayers pay, while shepherds and others were in some villages liable, and in others they were endowed with inám lands; the cause of this difference being found in the fact that in the one case they gave their services to the community gratis, and in the other they charged for them. From the absence of uniformity in the moturfa it was considered objectionable, and in 1860 was abolished in all Sircar taluks, and in every settled estate except Kárvétnagar. The proprietors received compensation for the withdrawal of their right to levy the tax, but Kárvétnagar declined to accept reasonable terms, and by him the moturfa is still collected. The revenue derived from the tax in various years has been as follows:—

Fasli.	Rs.
1236	30,899
1241	33,258
1246	32.295
1251	35,588
1256	35,813
1261	39,359
1266	41,812
1270	38,103

In Fasli 1271 it was discontinued.

Abkary.—The revenue under this head is drawn from two sources, viz., arrack, or country distilled liquor, and toddy, the fermented juice of the palm.

The system adopted by Government for several years was that of leasing out the toddy farms of portions of the district, and licensing arrack shops and stills in various localities, with unrestricted rights of distillation and sale. The number of stills licensed in 1836 was 701, and of shops 859. The value of arrack sold in that year was estimated at Rupees 1,20,000, while that of toddy was stated to be only Rupees 18,000. The Government tax upon a gallon of arrack sold was Rupees 3-11-0 per gallon, or 150 per cent. upon the cost of its production. No rule as to the strength of the liquor distilled was in force, and the supervision of the Collector over the shop-keepers was nominal. The abuses which resulted led to the renting out of the arrack monopoly in the same way as that of toddy, and the two farms were for some years put up together for competition. Finally the excise system, which now prevails, was applied to the arrack farm for the whole of the district, while toddy farms were let for small portions of it. The arrack contractor pays a fixed rate of duty upon all liquor issued by him, at regulated strengths, and within certain fixed limits of price, and he moreover guarantees that not less than a certain sum shall be paid by him to Government. The toddy rents do not vary with the amount of liquor sold. At present the strength of arrack issued is 20° U.P., the rate of duty being Rupees 2-10-0 per gallon, and the limits of price Rupees 4-12-0 to Rupees 3-0-0, while the guarantee amount is Rupees 2,42,000. In Fasli 1285 the issues reduced to 30° U.P. amounted to 132,048 gallons, and the actual sales to 113,383 gallons, the net duty paid being Rupees 2,90,740. This was the last year of normal consumption, for the famine began to affect sales in the subsequent year, when only 74,620 gallons were disposed of, and the net duty fell to Rupees 1,87,945. The toddy farms in Fasli 1286 realized the following sums :—

	RS.
Chittoor	11,220
Chandragiri	4,710
Palmanér	9,435
Gudiyátam	20,110
Vellore	15,910
Wálájá	14,500
Arcot	10,990
Wandiwash	3,110
Pólúr	4,510
Kálahastri	3,075
Kárvétnagar	8,720
Kangundi	5,270
Punganúr	2,920
Arni	6,150
Total ..	1,20,580

The total abkary revenue for various years was as follows :—

Fasli.						Rs.
1221 (1811-12)	..	..	..	..	..	71,722
1231 (1821-22)	..	..	..	..	..	1,02,800
1241 (1831-32)	..	..	..	..	..	1,25,023
1251 (1841-42)	..	..	..	..	..	1,22,800
1261 (1851-52)	..	..	..	..	..	1,30,990
1271 (1861-62)	..	..	..	..	..	1,84,371
1281 (1871-72)	..	..	..	..	..	....

PÉSHCUSH.—*Kálahastri and Kárvétnagar.*—The terms upon which the Kálahastri and Kárvétnagar Zemindars originally held their estates are not clearly ascertainable, but it is certain that they were under obligation to serve in time of war, with a certain number of armed retainers. The péshcush which they paid at the close of the eighteenth century was small, and whether it had ever been greater seems doubtful. The Nabobs of Arcot however were in the habit of increasing the Zemindar's contributions by occasional fines, and nuzzers upon successions; but when in 1792 the Zemindaris were transferred to the Company, it was stipulated that "the fixed péshcush should not be augmented, except by virtue of lawful existing instruments," and thus the Company were precluded from levying any extra contributions. As the nature of the British system was such as to render the military assistance of the Zemindars valueless, it was resolved, at the cession, to relieve them of the burden of maintaining troops, and to add the cost of this to the amount of their tribute. Mr. Stratton, who before the cession had been appointed Collector of Western Peshcush, reported upon the condition of the Zemindars, and from his letter it appears that their resources and peshcush were as follows:—

				Revenue. Rs.	Péshcush. Rs.
Kálahastri	..	..	..	4,41,675	37,713
Kárvétnagar	..	..	..	3,39,454	1,14,051

or, while Kálahastri paid but 8½ per cent. of his revenues, Kárvétnagar contributed 33 per cent. of his.[1] Lands granted free of rent to military retainers were excluded from the assets of the estate. There were many of these retainers entirely dependent upon their chief, and ready at his bidding to commit any crime. They were of three classes—amaram, kattubadi, and mercenary—the two first being paid chiefly in land, and the last entirely in money and grain. The amaram peons, who were originally

[1] It cannot be doubted that the resources of Kárvétnagar were never truly reported, as the above figures by no means represent the present relative values of the two estates. Mr. Stratton complained of the difficulty of obtaining complete accounts from the Zemindar, and of the falsity of those submitted to him. He was obliged to begin to measure the land himself, which elicited a second set of accounts, showing, in the case of one mittah, an increase of 71 per cent. The resources were no doubt again understated, and the name of the Brahman minister who deceived Mr. Stratton, is still mentioned in Kárvétnagar.

the only military retainers, were of the highest class, and might use what weapon they chose. Their appointment was hereditary, and they held lands on very favourable terms, a village being generally assigned to from eight to ten of them, who were considered as its merásidars, and paid a quitrent. The kattubadi, on the other hand, was nothing more than the village constable, whose services were utilized in time of war, he being bound to serve with a pike or matchlock, and receiving, while absent from his village, extra allowances in the shape of batta in money and grain. His ordinary emoluments consisted of a fixed amount of waste land, which he had to bring under the plough, and for which he paid "katnams" or presents, increasing with its increasing fertility. The mercenaries were adventurers who enlisted in the Zemindar's service, and whose appointment was not hereditary. They were paid by assignments of the rent due by defaulting ryots or renters, from whom the Zemindar had been unable to exact his dues

The cost of these establishments in the case of Kálahastri was estimated to be Rupees 1,82,525, and in that of Kárvétnagar Rupees 1,45,439. The former maintained 317 amarams, 842 kattubadis, and 3,918 mercenaries; and the latter 911 amarams, 3,396 kattubadis, and only 990 mercenaries. The Commissioners who reported upon the Zemindaris in 1802 (October 14th), expressed their hope that, when relieved of the expenses of keeping these lawless followers, they would "devote their superabundant wealth to those domestic comforts, and tranquil enjoyments which have in all ages been the greatest means of subduing the ferocity of barbarous tribes, and of substituting the pursuits of commerce, luxury, and peace." They recommended that the peshcush in the case of each should be raised to S. P. 60,000, or Rupees 2,10,000; but deducting the revenue from salt, customs, and abkary, the tribute of Kálahastri was reduced to Rupees 1,90,488, and that of Kárvétnagar to Rupees 1,87,663. Deductions have at various times been made on account of zemindari lands taken up by Government, and for other reasons. The present tribute due by the Zemindars is Rupees 1,76,790 for Kálahastri and Rupees 1,80,494 for Kárvétnagar. The former has accepted a decrease in his peshcush in lieu of the right to collect the moturfa tax, while Kárvétnagar has retained that right. The sunnuds of both these Zemindars were granted in September 1802. They differ from the ordinary form, in that the words "and exclusive of all lands and russooms heretofore appropriated to the support of village and police establishments" are omitted, and on this ground the Zemindars maintain that they possess the right to appoint and dismiss all village officers, a pretension which has several times been denied by Government.

Punganúr.—According to Colonel Munro's report upon this Zemindari, the earliest record of the peshcush paid is one of the middle of the seventeenth century, when the Zemindar, or Poligar as he was then called, having been dispossessed in 1642 by the Sultán of Bijápur, visited

Hyderabad and obtained a grant of Punganúr and Ávulapalle (a portion only of the present estate), which had been taken from the Maddenapalle Poligar. These districts were valued at Sherveroy Pagodas 60,000, and the peshcush was fixed at half that amount. This arrangement continued until the reign of Aurangzíb, when Zulfikar Khán fixed the terms of the Poligar's tenure at a payment of Sherveroy Pagodas 10,000 in cash, and the service of a hundred horsemen valued at Sherveroy Pagodas 8,000, and of two thousand footmen valued at Sherveroy Pagodas 22,000, the pagoda being worth just Rupees 3. In 1713 the Nabob of Cuddapah increased the tribute to Rupees 32,000, and directed that the Poligar should during war bring 2,000 footmen into the field. Thirty-four years later the districts of Saddam and Kandúr, which the Poligar claimed as part of his former estate, were restored to him, and at the same time the péshcush was reduced to Rupees 60,000. During the Mahratta war of 1755 the Cuddapah Nabob was slain, and Punganúr formed part of the territory ceded to the victors. The Poligar then bribed the Nabob's Dewán to put his tribute down as only Rupees 32,000. During the succeeding twenty years the estate frequently changed masters, and the tribute varied, but in 1771 was fixed as low as Rupees 28,000 "on account of the destitute condition of the country." When the estate came under the Mysore ráj the peshcush was raised to Conteroy Pagodas 20,000, *plus* C. P. 5,000, for durbar expenses, or not quite Rupees 75,000 in all. After the peace which terminated the third Mysore war, the Poligar was directed to pay C. P. 30,000, but for paying little of it was, in 1795, expelled. He recovered possession during the last Mysore war, and at its conclusion his tribute were fixed at C. P. 20,000, or nearly Rupees 60,000, of which two-thirds was payable to Mysore, and one-third to the Company. Colonel Munro soon drew attention to the inconvenience of this arrangement, and the whole of the estate was transferred to the Company, an equivalent in land of the two-thirds being given to Mysore in exchange. Regarding the tribute Colonel Munro expressed his opinion that there was "no reason for making it less, but many for making it more, if the country can support it," and he adds that "the necessity for establishing the authority of Government in Punganúr, and of preventing future disturbances, demands a reduction of the Poligar's power." For this purpose he proposed that the Poligar should receive one-fifth of the gross revenue, "or so much less as may be found convenient," and that he should be entrusted with the collection during his good behaviour. This was the proportion allowed to other proprietors in the Ceded Districts, and, as in their case, the Collector ordered Punganúr to dismiss all his military establishment, except the kattubadis or village police.

The Poligar collected the revenue of his estate until 1808, when the three years' lease began. In 1811 Mr. Ross, then Collector, wrote expressing his disbelief that the Poligar could ever have paid the enormous sums mentioned by Colonel Munro. The average land rent for the past seven years had been less than Rupees 80,000; but the

cultivation had been affected by the uncertainty regarding the eventual settlement of the estate, and by the three years' lease; he therefore proposed a ryotwari settlement. This the Board of Revenue approved, and they viewed with favour the idea of granting the estate to the Poligar, with the title of Zemindar, upon terms of his paying two-thirds of its value. It contained 69 villages and 675 hamlets, of which 233 hamlets were granted as inám to amaram peons, faithful servants, Brahmans, and the like. The average revenue during the ten years' lease had been Rupees 96,337, and, during the seven years 1809–15, Rupees 1,01,087, and they recommended to Government that the péshcush should be fixed at Rupees 63,000. In 1815 Government approved and directed that a cowle on these terms should be issued, subject to the approval of the Court of Directors. The latter, however, refused sanction, and the Collector accordingly managed the estate on the ryotwary system. The Poligar applied to be allowed the management, and this in 1825 was permitted, he being allowed one-fifth of the survey assessment, any loss, by reduction of rents, falling upon Government. In the following year the Poligar was further gratified by being allowed to conduct the jamabundi himself, and to issue puttahs under his own signature, but he was still dissatisfied, and sent in a strong remonstrance, which resulted in Government directing that he should be left independent, paying a tribute of Rupees 63,000 pending a reference to the Court of Directors. The Board, however, thought this left him too little, and suggested a peshcush of Rupees 51,000 for the first three years, and a subsequent rise by increments of Rupees 1,000 every alternate year, until in the twentieth year the full amount was reached. This too was sanctioned by Government, but, in 1835, the Court of Directors again declined to issue a permanent sunnud, though they consented to a cowle for twenty years on the terms proposed by the Board. When the leases terminated, in 1854, annual engagements were entered into with the Poligar for a payment of Rupees 63,000, until a permanent sunnud was at last, in 1861, granted on the same terms, with the title of Zemindar. The amount was subsequently raised to Rupees 66,987-5-8 on account of quit-rent charged by the Inám Commissioner on lands within the zemindari. The present peshcush is Rupees 66,859-6-10, a reduction of Rupees 127-14-0 having been made for lands taken up for the Saddam road.

Kangundi.—This Zemindari at first formed portion of the Krishnagiri Division of the Báramahál, and the early correspondence regarding its settlement is not therefore to be found in the records of this district. It appears, however, that the Collector, Colonel Graham, in 1805, estimated its value at Rupees 60,000 for Sircar lands, and Rupees 1,00,000 for ináms. Colonel Graham's figures were however never acted upon, and Colonel Reade, with reference to the assessment, remarked that it was 20 per cent. higher than others in his district, which were themselves too high. The Poligar paid a peshcush of Rupees 23,734, managing the estate as a temporary measure until 1816, when it was

attached for arrears and settled by Mr. Græme. In 1818 the Collector proposed that an entirely new survey should be made, and the peshcush raised to Rupees 28,241. Government objected to the latter measure, but authorized the resurvey of all ináms before the restoration of the estate. There was some delay in carrying out these orders, but the work was completed in 1823, and in 1824 an order was passed that the Poligar should not resume any of the inám lands without the sanction of Government, and that he should keep up an efficient police. In 1832 a permanent sunnud was offered, on a peshcush of Rupees 23,733-1-9, but was declined. In 1853 a more careful survey of ináms was made, for the order of 1824, never having been communicated to the Poligar, he had dealt with these as he pleased, and had for years refused a sunnud, which reserved the reversionary right to them to Government. The value of the ináms which remained in 1853 was found to be Rupees 57,334, and it was proposed, as a compromise, to give up to the Poligar all mokassa, rájaband, kattubadi and military ináms, valued at Rupees 31,888, and to enfranchise the dasabandam, religious, and personal grants, valued at Rupees 25,496. Government approved, only excepting such ináms as had been granted after Colonel Graham's survey, unless these had been given in substitution for old ones. Finally such an arrangement was made, and the Poligar accepted a sunnud in 1872, giving him the title of Zemindar, and fixing his peshcush at Rupees 23,030-9-10. This was reduced by Rupees 66-9-8, the jodi payable upon Peddabangárunattam village, erroneously added to the peshcush, and again by Rupees 5 for land taken up by Government. The present peshcush is therefore Rupees 22,959-0-2.

Arni.—This jaghire was, early in the seventeenth century, granted by the Sultán of Bijapúr to one Vedaji Bhásker Punt, a Mahratta Brahman, for faithful military service. The original sunnud and early records of the family are not forthcoming, having been destroyed during the Mahommedan invasion of 1690, and it is therefore unknown what tribute was at first paid. The estate was held without interruption until 1761, when the Nabob attached it, and dispossessed the jaghiredar, in consequence of his not paying a contribution after the war, and various other acts of disobedience. On the conclusion of peace, in 1762, between the Nabob and the Tanjore Rajah, the estate was restored on various conditions, one being that an annual nuzzer of Rupees 10,000 should be paid. It was again attached in 1771, and not given back until 1789, when Mr. John Holland, Governor of Madras, placed Srinivasa Row, the representative of the family, in possession. His successors have received a fresh sunnud upon each succession, and paid the same annual nuzzer until 1872, when a reduction of Rupees 4,000 on account of resumed moturfa was made. Other reductions bring the nuzzer down to Rupees 5,099.

Chittoor and Chandragiri Páliems.—There are at present six of these, viz., Bangári, Náraganti, Tumba, Gudipáti, Pulicherla, and Kallúr. The amounts at first contributed by them to the State are not known,

but at the commencement of the eighteenth century, upon the defeat of the Poligars, their united peshcush, including that of the zufted Páliems of Mogarála, Pullúr, Pákála, and Yedaragunta was fixed at Palliput Pagodas 40,000, how distributed there is no means of ascertaining. Some years later the Nabob Dóst Ali reduced the tribute to less than a half, and distributed it thus :—

	P.P.
Bangári	4,300
Mogarála	2,800
Náraganti	2,900
Pullúr	2,700
Pákála	2,300
Pulicherla	1,200
Kallúr	775
Tumba	410
Gudipáti	1,710
Total ..	19,085 Palliput Pag.

Abdul Waháb, brother of the Nabob, in consequence of the contumacy of his vassals, raised their tributes to the following sums :—

—	Peshcush.	Nuzzer.	Total.
	P.P.	P.P.	P.P.
Bangári	3,125	3,125	6,250
Mogarála	2,459	2,459	4,918
Pákála	2,150	2,150	4,300
Náraganti	2,500	2,500	5,000
Pullúr	2,350	2,350	4,700
Pulicherla	1,200	1,200	2,400
Kallúr	816	816	1,632
Tumba	400	400	800
Gudipáti	560	..	560
Total ..	..	..	30,560

After his return from imprisonment at Seringapatam, Abdul Waháb rearranged the peshcush thus :—

—	Peshcush	Nuzzer.	Total.
	P.P.	P.P.	RS.
Bangári	3,049 0	991 4	11,505
Mogarála	1,991 0	606 0	7,026
Pákála	2,675 4	1,225 0	10,238
Pullúr	2,374 0	1,335 0	9,734
Náraganti	2,490 0	1,421 8	10,762
Pulicherla	1,144 0	670 0	4,760
Kallúr	748 4	454 8	3,157
Tumba	395 12	227 0	1,634
Gudipáti	560 0	..	1,470
Total ..	..	..	60,286

At the cession there were large arrears, though the exact amounts could only be ascertained for Faslis 1209 and 1210. Mr. Stratton considered that these balances arose from the defiant attitude which the Poligars were able to assume by the aid of their retainers, who numbered 558 amarams, and 4,324 kattubadis. As they held no sunnuds showing that they held on any feudal tenure, he did not call upon them to dismiss their peons; but made large temporary additions to their tribute, preparatory to a permanent settlement with them. The amounts fixed were these:—

	S. P.		Rs.	A.	P.
Bangári	8,500	or	29,750	0	0
Mogarála	7,000		24,500	0	0
Pákála	6,000		21,000	0	0
Pullúr	4,200		14,700	0	0
Náraganti	4,100		14,350	0	0
Pulicherla	2,625		9,187	8	0
Kallúr	1,750		6,125	0	0
Tumba	700		2,450	0	0
Gudipáti	900		3,150	0	0
Total ..	1,25,212		8	0	

The result of this measure was the revolt of all the Poligars, save Gudipáti. When this was subdued the Pákála, Mogarála, and Pullúr Páliems were finally resumed, and the remaining estates were administered on the same principles as the Government taluks of the districts, 18 per cent. of the land revenue being paid to the Poligars. In 1819 Government ordered the restoration of the páliems. According to the English proclamation published at the time of the rebellion, the rebels had been promised two-fifths of the value of their estates. The vernacular copy offered them three-fifths, which was the proportion tendered to them by the Commissioners deputed to pacify them. It appeared that this was what had been originally intended, and it was accordingly calculated upon the average collections during the decennial lease, three-fourths of the survey rate on amaram, and rajáband, and two-thirds on miscellaneous ináms, being deducted thus:—

Estates.	Average of 10 Years.	Three-fourths Ameram and Rajaband Ináms.	Two-thirds of Miscellaneous Ináms.	Government two-fifths share.
	S.P.	S.P.	S.P.	Rs.
Bangári	8,181 5 57	100 16 28	396 23 29	12,149
Tumba	1,263 0 0	6 4 59	22 12 70	1,808
Náraganti	4,514 20 9	113 40 63	114 34 0	6,640
Kallúr	2,369 6 59	534 36 74	79 0 37	4,176
Pulicherla	3,449 21 64	425 24 69	137 30 37	5,617

The peshcush of Gudipáti was on the same principles fixed at S. P. 871-28-55, or Rupees 3,050. These figures show how extravagant had

been Mr. Stratton's valuation, and explain to some extent the feelings which led to the revolt of the Poligars. Though the tributes were fixed in 1819, the estates still continued for a few years under management as the Poligars had contracted debts. In 1863 the Board recommended to Government the grant of permanent sunnuds, which was approved of. Sunnuds were in 1866 tendered to, and accepted by each. The present peshcush paid on the estates is :—

	RS.
Bangári	11,644
Tumba	1,783
Pulicherla	5,580
Kallúr	4,097
Náraganti	6,554
Gudipáti	2,849

various small deductions having been made from time to time on account of lands taken up for public purposes, ináms resumed, and the like.

List of Collectors of North Arcot.

Date with Year.	*Names of Collectors.*
2nd August 1801 ..	Mr. George Stratton, Principal Collector.
8th February 1803 ..	„ Cockburn, do.
25th December 1804 ..	„ Græme, do.
15th April 1818 ..	„ Robert Sherson, do.
1st March 1819 ..	„ C. Roberts (Sub-Collector in charge).
15th October 1819 ..	„ J. Hutt, Acting Collector.
17th August 1820 ..	„ W. Cooke, Principal Collector.
1st December 1824 ..	„ H. Chamier (Sub-Collector in charge).
14th February 1825 ..	„ Nisbet, Principal Collector.
29th March 1827 ..	„ Davis (Sub-Collector in charge).
23rd April 1827 ..	„ C. Roberts, Principal Collector.
18th February 1832 ..	„ W. H. Babington (Sub-Collector in charge).
3rd March 1832 ..	„ R. Eden, Acting Collector.
1st January 1833 ..	„ C. Roberts, Principal Collector.
17th February 1836 ..	„ Hallett (Sub-Collector in charge).
31st March 1836 ..	„ G. M. Ogilvie, Acting Collector.
14th November 1836 ..	„ C. Roberts, Principal Collector.
14th January 1837 ..	„ G. M. Ogilvie, do.
31st January 1842 ..	„ J. D. Bourdillon (Sub-Collector in charge).
23rd February 1842 ..	„ J. Goldingham, Acting Collector.
13th March 1843 ..	„ W. H. Babington (Sub-Collector in charge).
3rd September 1843 ..	„ J. Goldingham, Collector.
6th February 1845 ..	„ E. C. Lovell, Acting Collector.
20th March 1848 ..	„ R. B. M. Binning (Sub-Collector in charge).
27th April 1848 ..	„ J. D. Bourdillon, Acting Collector.
8th March 1851 ..	„ S. N. Ward, do.
19th January 1852 ..	„ H. A. Brett, do.
29th August 1853 ..	„ R. B. M. Binning (Sub-Collector in charge).
8th December 1853 ..	„ J. D. Bourdillon, Collector.
23rd October 1854 ..	„ R. B. M. Binning (Sub-Collector in charge).
30th October 1854 ..	„ C. Whittingham, Collector.
8th August 1855 ..	„ R. B. M. Binning (Sub-Collector in charge).

List of Collectors of North Arcot—(Continued).

Date with Year.			*Names of Collectors.*
7th November	1855 ..	Mr.	C. Whittingham, Collector.
22nd July	1859 ..	„	J. D. Robinson, Acting Collector.
29th June	1861 ..	„	Do. Collector.
1st February	1862 ..	„	J. Fraser, Acting Collector.
8th December	1863 ..	„	Do. Collector.
6th August	1864 ..	„	G. Banbury, Acting Collector.
13th July	1865 ..	„	J. D. Robinson, Collector.
5th April	1868 ..	„	G. VansAgnew, Acting Collector.
23rd October	1868 ..	„	J. D. Robinson, Collector.
7th May	1870 ..	„	W. S. Whiteside, Acting Collector.
4th May	1871 ..	„	J. D. Robinson, Collector.
27th April	1872 ..	„	W. S. Whiteside, Acting Collector.
4th March	1873 ..	„	Do. Collector.
21st March	1873 ..	„	H. Sewell, Acting Collector.
21st June	1873 ..	„	W. S. Whiteside, Collector.
3rd May	1879 ..	„	D. Buick, Acting Collector.
3rd August	1879 ..	„	W. S. Whiteside, Collector.

Statement of Revenue of the District of North Arcot.

Fasli.	Land Revenue.	Péshcush.	Abkári.	Licenses.	Customs.	Tirupati.	Salt.	Stamps.	Moturfa.	Total.	Remarks.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	
1221 ..	13,60,881	4,21,164	71,722	19,341	1,06,700	1,91,576	..	..	..	22,71,384	Season very bad.
1222 ..	16,36,131	4,21,164	62,083	19,698	1,11,328	1,78,451	..	..	..	24,28,855	Season indifferent.
1223 ..	16,65,636	4,21,164	73,630	21,826	1,20,852	1,82,668	..	..	..	24,85,776	Season not particularly favourable.
1224 ..	16,72,640	4,21,164	72,545	22,520	1,33,865	1,44,862	..	..	..	24.67,596	Season moderately good.
1225 ..	16,76,512	4,21,047	78,649	21,563	1,47,252	2,25,180	..	..	..	25,70,208	Season generally very good.
1226 ..	16,87,336	4,21,047	78,094	22,727	1,42,836	1,65,272	..	..	..	25.17,345	Rains scanty and season rather unfavourable.
1227 ..	16,95,662	4,21,047	88,627	19,870	1,48,856	1,26,040	..	..	..	24,94,674	Season favourable.
1228 ..	..	..	..	..	..	..	..	..	..	..	Violent epidemic of cholera.
1229 ..	16,93,803	4,21,047	84,617	..	1,56,789	78,496	..	..	..	24,34,753	Season very unfavourable. Severe storms in May
1230 ..	19,04,022	4,21,047	91,796	..	1,50,218	1,02,119	..	..	..	26,69,204	Rains failed. Collector applied for Rupees 1,400 for conducting ceremony called "Rudrabishékam."
1231 ..	20,03,218	4,21,047	1,02,800	Included in Land Revenue.	1,45,000	1,23,337	..	..	..	27,95,404	Season tolerably favourable, though early rains failed.
1232 ..	21,07,643	4,21,047	80,496		1,78,685	1,42,150	8,630	..	..	29,38,653	Season generally very favourable.
1233 ..	11,81,013	4,21,047	1,04,100		1,53,100	95,561	17,811	..	..	19,72,630	Lengthened distress. Rupees 25,000 sanctioned for relief works; food distributed to the decrepit.
1234 ..	14,37,293	4,21,047	70,000		1,20,785	1,46,356	17,556	..	..	22,13,039	Rains inadequate and untimely.
1235 ..	14,71,784	4,27,481	63,027		1,20,785	1,07,784	14,040	..	29,769	22,44,670	A more favourable year.
1236 ..	16,34,452	4,37,481	71,631		1,36,350	1,24,137	14,065	32,391	30,899	24,81,409	A very favourable year.
1237 ..	14,54,318	4,51,438	1,05,563		1,59,566	1,26,777	22,333	..	31,167	23,21,384	Early rains unfavourable and north-east monsoon late. Several tanks breached.
1238 ..	14,14,932	4,51,438	1,17,800		1,78,740	1,18,247	23,618	53,427	31,924	23,73,261	Season unfavourable.
1239 ..	13,56,071	4,51,438	1,25,175		1,85,440	1,17,447	14,194	36,781	32,793	22,30,350	Season very unfavourable.
1240 ..	14,79,502	4,50,953	1,25,175	8,264	1,79,340	1,18,361	16,668	30,806	33,430	24,42,501	A very favourable year, especially the early part.
1241 ..	15,90,516	4,50,953	1,25,023	7,857	1,64,343	72,613	22,509	28,345	33,258	24,95,420	The most favourable year since Fasli 1232.
1242 ..	8,13,102	4,50,953	1,25,425	10,072	1,55,300	59,468	13,310	28,591	32,663	16,88,887	Season of unprecedented severity. Langarkhánas opened in chief towns.
1243 ..	..	4,50,953	79,027	6,977	1,15,657	54,051	8,879	21,309	29,017	..	Season continued unfavourable till setting in of north-east monsoon.
1244 ..	15,20,194	4,50,953	74,589	7,492	1,44,608	92,620	11,135	26,380	29,592	23,57,570	Early rains very favourable; late ones failed altogether.
1245 ..	14,24,533	4,50,953	85,000	10,901	1,25,001	1,15,698	13,301	30,819	30,972	22,87,181	
1246 ..	14,09,565	4,50,953	86,000	7,556	1,35,375	1,14,975	18,620	35,463	32,295	22,90,806	A severe storm in October damaged many tanks.

1247 ..	15,23,704	4,50,953	1,05,442	8,803	1,51,697	1,19,592	29,413	30,773	32,862	24,53,242	Early rains failed. North-east monsoon plentiful.
1248 ..	14,39,225	4,50,953	91,000	8,761	1,38,274	87,654	32,142	30,442	33,915	23,12,399	Very unfavourable season until September.
1249 ..	17,38,703	4,50,953	87,730	8,488	1,47,368	82,620	21,373	30,682	34,236	26,02,158	The most favourable season for 16 years.
1250 ..	16,25,099	4,50,953	1,01,775	9,790	1,51,940	1,10,809	36,491	30,469	34,902	25,52,232	Early rains failed, and late ones not good.
1251 ..	16,70,226	4,50,953	1,22,800	8,569	1,40,140	1,00,867	20,039	27,744	35,588	25,76,928	Season fair.
1252 ..	14,62,720	4,50,953	1,32,974	7,141	1,36,498	97,408 Sea Customs.	32,156	27,987	35,372	23,82,230	Season moderate. Cholera prevalent. Tirupati offerings given up.
1253 ..	15,64,318	4,50,953	1,41,100	6,190	1,19,918	461	19,540	24,508	35,614	23,62,606	Season generally favourable. Land Customs abolished.
1254 ..	14,87,101	4,50,953	1,29,050	6,653	4,674	140	27,712	18,338	35,725	21,60,346	Early rains scanty, and north-east monsoon late.
1255 ..	13,02,380	4,50,953	1,44,900	9,755	..	84	29,990	12,947	35,813	19,87,110	Season unfavourable. Late rains very inadequate.
1256 ..	16,24,950	4,50,953	90,200	5,876	..	1,268	10,490	13,465	35,016	22,31,040	Early rains favourable. A cyclone in November did extensive damage.
1257 ..	17,71,118	4,46,964	1,24,500	6,378	..	..	15,138	16,239	35,157	24,16,765	An extremely favourable year.
1258 ..	17,28,633	4,44,186	1,31,100	6,897	..	..	11,937	22,364	37,596	23,82,713	Season moderate. Cholera prevalent.
1259 ..	14,32,505	4,44,186	1,35,900	6,114	..	..	18,970	23,917	38,367	20,99,992	Season bad. South-west rains scanty; north-east rains almost failed.
1260 ..	16,40,033	4,44,186	1,35,900	6,527	..	..	21,045	29,225	38,663	23,15,581	A tolerably good year. Cholera abating.
1261 ..	17,50,321	4,44,186	1,30,990	6,002	..	..	..	23,100	39,359	23,94,460	A particularly favourable year. Cholera still prevalent.
1262 ..	17,15,905	4,44,186	1,04,000	5,713	..	..	..	23,217	39,767	23,32,790	An equally favourable year. Cholera abating.
1263 ..	12,71,351	4,44,186	1,04,000	11,288	..	..	..	24,494	37,343	18,92,664	A most unfavourable year. Cholera very prevalent.
1264 ..	14,06,620	4,44,186	1,04,000	6,688	..	..	..	25,051	36,622	20,23,167	Season poor. Cholera, and much cattle disease.
1265 ..	15,63,204	4,44,186	1,04,000	..	..	..	..	22,487	35,948	20,68,625	A moderate season. Cholera much decreased.
1266 ..	17,74,801	4,44,186	1,13,350	..	..	..	..	22,720	41,812	23,96,869	A very favourable year. Cholera and cattle disease still bad.
1267 ..	13,99,150	5,06,811	1,34,350	..	..	..	..	31,387	42,399	21,14,097	South-east monsoon scanty: north-east rains abundant: cholera almost disappeared. Reduced assessments introduced.
1268 ..	16,21,156	5,06,811	1,34,356	..	..	..	..	37,971	42,254	23,42,542	Season good and healthy.
1269 ..	17,39,247	5,04,930	1,34,350	..	..	..	..	38,398	43,371	24,60,296	Season good.
				Income-tax	Forests.						
1270 ..	16,00,362	5,04,844	1,33,950	58,710	3,692	..	..	97,606	38,161	24,97,325	Season unfavourable. Cholera prevalent.
									One month		
1271 ..	16,24,262	5,06,709	1,34,371	72,821	15,463	..	..	1,37,253	877	25,41,756	Season unfavourable. Prices almost at famine rates in June 1862. Moturfa abolished.
1272 ..	16,98,107	5,01,461	2,92,155	74,306	10,829	..	..	86,308	..	26,63,166	Season moderate.
1273 ..	17,07,730	5,00,239	2,92,155	38,195	14,239	..	..	95,952	..	26,48,510	Late rains failed. Cholera and cattle disease prevalent.

Statement of Revenue of the District of North Arcot—(Continued).

Fasli.	Land Revenue.	Péshcush.	Abkári.	Licenses.	Customs.	Tirupati.	Salt.	Stamps.	Moturfa.	Total.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1274 ..	18,77,283	5,00,226	2,92,218	34,861	13,805	..	..	1,00,813	..	28,19,206	Season good. North-east rains abundant and seasonable. Cholera prevalent.
1275 ..	18,53,571	5,00,211	2,92,248	17,381	..	..	..	97,974	..	27,61,525	Season good. North-east rains too violent, doing much damage.
1276 ..	18,95,053	4,99,319	2,92,375	21,930	..	..	..	1,10,595	..	28,19,672	Famine until August when there was a downpour followed by an abundant north-east monsoon.
1277 ..	14,21,130	5,09,845	2,92,734	21,931	..	..	..	1,37,572	..	23,83,212	Most disastrous year. South-west rains light and north-east rains altogether failed.
1278 ..	15,65,433	5,09,845	2,92,767	15,344	10,578	..	..	1,30,716	..	25,24,683	Continued distress. North-east rains favourable.
1279 ..	16,56,022	5,35,246	3,43,477	51,950	8,443	..	..	1,40,581	..	27,35,719	A favourable year.
1280 ..	22,18,705	5,12,052	2,82,883	84,632	15,347	..	..	65,462	..	31,84,081	North-east monsoon very light.
1281 ..	23,93,063	4,88,441	3,30,394	27,707	21,405	..	..	1,43,302	..	34,04,312	Season favourable.
1282 ..	19,98,173	5,20,427	2,91,141	17,287	14,685	..	..	1,63,437	..	30,05,150	Violent cyclone in May: heavy rains in November.
1283 ..	19,12,461	5,28,099	3,04,937	492	19,555	..	..	1,92,432	..	29,57,976	A good year.
1284 ..	22,38,408	4,35,603	2,86,903	25	17,257	..	..	1,88,443	..	31,66,639	Heavy rains from September to October. Pálár and Poiny anicuts breached and Pálár bridge partly carried away.
1285 ..	17,48,191	4,79,130	4,02,202	..	17,566	..	..	1,98,500	..	28,45,589	A favourable year; cholera very prevalent.
1286 ..	5,79,780	1,36,052	2,88,618	..	22,120	..	..	1,87,287	..	12,13,857	Rains altogether failed and severe famine set in; cholera and other disease prevalent.
1287 ..	15,87,573	4,75,552	2,14,459	..	15,093	..	..	1,73,288	..	24,65,965	The worst famine within the memory of man; cholera and other disease prevalent.
1288 ..	20,03,494	4,86,724	2,85,039	69,486	14,299	..	..	1,95,479	..	30,50,521	Famine abated and general health improved.

CHAPTER IV.

GENERAL DESCRIPTION OF THE TALUKS AND TOWNS.

CHANDRAGIRI TALUK.

THE taluk of Chandragiri is the most northerly in the district, and adjoins the Cuddapah frontier. It is bounded on the north by the taluks of Pallampet and Váyalpád of that district; on the west by the Punganúr Zemindari; on the south by the Chittoor Taluk and the Zemindari of Kárvétnagar; and on the east by portions of that estate and of Kálahastri. Its area is about 548 square miles; the average length being above 35 miles, and the average breadth about 16 miles.

Chandragiri is one of the most hilly and picturesque taluks in the district. The Eastern Ghauts run through the north of it, and the Kárvétnagar hills occupy most of the south. It may indeed be said to consist of hills, more or less bare and rocky, and of narrow valleys rich with the alluvial soil brought down from the hills. Its physical characteristics render it one of the most fertile divisions of North Arcot, the water-level being always high, and the scrub jungles upon the hills affording abundance of leaf manure, which the ryots are not backward in using. The Chandragiri cultivators are probably the best in the district: hardworking since they are Telugu men, and fond of high farming since they have the means.

The chief valleys are those of Dámalcheruvu, Nágapatla, Tirupati, and Mámandúr. Along these roads are constructed. That along the Dámalcheruvu valley passes from the Chittoor Taluk through the Kallúr Ghaut to Váyalpád in Cuddapah. The Nágapatla road is yet incomplete, but will in time be continued to Bákarapett, whence a good Cuddapah road goes to Pílér. Along the Tirupati valley, the broadest in the taluk, passes the trunk road to Kálahastri and Nellore. A neglected road, by the side of the railway, connects Tirupati with Bálapalle, *viâ* Mámandúr. Many footpaths connect the valleys with one another, but they are steep and paved with rough stones, though fit for foot passengers and laden cattle. The roads and their mileage within the taluk are given below:—

1. Chittoor to Kálahastri	35 miles	Avenued.
2. Branch from the above through Dámalcheruvu to Váyalpád	11 „	Partly avenued.
3. Cross road uniting the above	8 „	Not avenued.

4. Nendragunta to Pennamari	4 miles.	Not avenued.
5. Bálapaile to Púdi	16 ,,	Do.
6. Tirupati to Púdi	6 ,,	Do.
7. Tirupati to Karkambádi	7 ,,	Partly avenued.
8. Cherlopalle to Rangampett	6 ,,	Not do.
9. Chandragiri to Tirupati Hills ..	5 ,,	Avenued.
10. Tirupati to foot of hills	1 ,,	Do.
Total ..	99	

Besides this a famine road, 7 miles long, from Dámalcheruvu to Mangalpent has recently been made, but is not in good order.

The most considerable and interesting hills in the taluk are those of Tirumala, upon which the sacred temple of Tirupati stands. This range, upwards of 2,000 feet high, forms portion of the Eastern Ghaut line, and is about 100 square miles in extent. The whole area is considered sacred, and until the close of 1871 had never been ascended by any but Hindus. In that year the prestige of ages was broken through, and the hills were, by a Government order, thrown open to the European officers of the district, since there was reason to suppose that much crime was perpetrated without detection in the holy town. The order excited great opposition at the time, but European visits now produce little sensation. These hills are of quartzite, while the rest of the taluk belongs to the gneissic formation. They rise rather gradually from the south-east, but their western, southern, and eastern faces are steep and cliff like. On the north the hills run into Cuddapah, their continuation being there known by the name of the Séshachellam range.

Two principal rivers drain the taluk. That called after the village of Dámalcheruvu rises in the Kallúr Páliem, flows down the ghaut, and passes for a short distance along the west of the Chandragiri Taluk into that of Chittoor, where it is known as the Poiny. The Suvarnamukki is the more important stream, and is held in much reverence by the people. One of the feet of Siva is supposed to rest upon it, and consequently to celebrate the annual ceremonies of a deceased parent near its banks is a very meritorious act. It is called the Suvarnamukki, or golden river, since it rises in, or rather near, Mount Mérú, the Tirupati hills being believed to be portion of that holy and golden mountain. Others explain that it is precious as gold, and thereby obtained its name. The river takes its rise near the village of Ādenapalle, in the Chittoor Taluk, where a gigantic figure of Hanumán (the monkey god) is engraved upon a rock, whence the water rises and flows into a tank. From the surplus of this it continues and passes northwards, and then to the east along the Tirupati valley, receiving the waters of many hill streams on its way. After a course of 78 miles in this district, and 21 miles in Nellore, it discharges into the sea. The chief of its affluents are the Kalliánanadi and the Bhímanadi. The former comes down the Sámala valley, north of Chandragiri, and is

rarely quite dry. The Bhímanadi rises near Mangalpent, in the Pulicherla Páliem, and unites with the Suvarnamukki near Bákara agrahárum, a hamlet of the kasba town. It is believed to have originated from a sacrifice made by Bhíma, one of the five Pándavas, while he and his brothers were wandering in the jungles. As a proof of the truth of this story the people point to some white decomposed shale near the spring of the river, which they regard as the ashes resulting from the sacrifice. The white clay is esteemed to be very holy, and being mixed with milk is often used by pious Brahmins for making their sectarian marks.

Unlike most other large rivers in the district, the Suvarnamukki has generally a little water in it, except for a short distance between Chandragiri and Tondavada. The disappearance of the water here was caused, so the story runs, by the rishi Agastaya, who used to live on Chandragiri hill. While he was deeply meditating one day, the stream rose so high as to threaten to invade his retreat. In his excitement he cursed the river, and prayed that it might flow beneath the surface of the soil; and now it does so, except in times of flood. Very little is done in the way of conserving the waters of the Suvarnamukki, though it has great capabilities, and an anicut might probably be constructed across it, near Chandragiri, with advantage to the people and profit to Government.

The forests of Chandragiri are the most extensive and valuable of any in the district. The best grow along the eastern slopes of the Tirupati hills, being the southern continuation of the Bálapalle jungles of Cuddapah. They are nearly all hill tracts, and about three hundred square miles in extent, of which about one hundred square miles is under imperial, and the rest under local conservancy. Of the best forest about fifty square miles belong to the Poligars of Karkambádi and Krishnápuram, who continue to fell in a reckless manner. In the Government jungles there is much red sanders wood, but all reserved as it is too young to be felled. Almost all the trees to be found elsewhere in the district are to be found here, and really fine trees are still to be met with in spite of past reckless felling. Careful conservancy is now doing much to restore the jungles, and the timber will soon be of great value. There is only one reserve, four square miles in extent, near Mámandúr, which was taken up in 1871. It is now fit for felling, and the yield is expected to be from twenty to thirty tons per acre, which, the seigniorage being a rupee per 1,000 lb., will give a profit to Government of between Rupees 50,000 to Rupees 1,00,000. A good deal of bamboo is cut upon the slopes of the Tirupati hills, and upon their summit the sandal and champak flourish. A superior sort of orange tree, called the Hyderabad graft, is also here cultivated, and the fragrant flowering trees zédári and kódári are said to be peculiar to these hills. Jungle products, such as honey, wax, medicinal roots, lac, dye, cocoons, &c. are plentiful and sold in large quantities by the jungle men.

Some of the gorges of the Tirupati hills are charmingly pretty, often ending in a not insignificant waterfall surrounded with dense vegetation. In the moist and sheltered portions of the plateau patches of forest also occur, and many ferns, including the graceful maiden hair, grow among the rocks and by the sides of the streamlets. The taluk is everywhere better wooded than is usual in the rest of the district, and has a comparatively fresh and green appearance even in the height of the hot weather. A large extent of pasture is available, and cattle in the dry season are brought here from some distances to graze. During the recent famine this was particularly observable.

The soil chiefly consists of black and red clays mixed with sand, of which the red soil is considered the more fertile.

At Tirupati, Chandragiri, and Aiyathapallo limestone is found in some quantities. Iron sand is gathered in the beds of streams near Sámala, Aiyathapallo and Bandálamalai, in which villages it is smelted and made mostly into the plates of ploughshares.

Game is fairly abundant. Cheetahs are only too common to please the ryot, and a man-eating tiger occasionally spreads terror for months together in the Tirupati jungles. Bison are spoken of as having been common in former days, but are never seen now. Peacocks with the ordinary feathered game of the district are numerous upon the hill slopes.

The valleys of the taluk are on the whole healthy, though at times fever is prevalent. A like favourable account cannot be given of the hills, and particularly of the Tirupati range, where the climate is deadly, and a residence of even a few days ensures an attack of malarious fever. Even the priests of the temple frequently relieve one another in doing duty at the shrine, but a few byrágis reside permanently in the upper town, where they are invariably the victims of spleen and other diseases resulting from fever.

The manufactures of Tirupati and its neighbourhood are not unimportant. Tirupati and Agarála are noted for images cut out of red sanders wood. The carving is rough but clever, and the prices of the images very moderate. Out of the same wood are cut, at Tirupati and Jépálen, culinary utensils, a manufacture quite peculiar to these places. Brass vessels and plates are largely made at Tirupati and Mallávaram, and are skilfully engraved with floral devices or pictures illustrating the religious fables of the Hindus. In Tirupati a few artificers vary this work by inlaying silver and copper upon the brass, and their wares are by some much admired. Copper images are made at Tirupati and Perumálapalle, but all that is sold here is not of local manufacture. The demand probably exceeds the local supply, and there is reason to suspect that many of the idols are of Birmingham manufacture imported from Bombay; the brazen vessels are many of them of Vellore make. Another purely local industry is the making of stones for rubbing sandalwood into powder, out of a sandstone called "Gandhapúsana rai," which is quarried by Woddas near Tirupati and Mámandúr. Almost

every pilgrim carries away one of these stones with him, the price varying, according to size, from a few pies to Rupees 10. At the village of Gázulamandiem glass beads are formed, while bangles are made at Tirupati from lumps of glass purchased from the manufacturers of Soudapalle (soda-village) in the Kálahastri Zemindari.

The exports of Chandragiri are chiefly grains, jaggery, and timber. In 1875 from the Tirupati station, the only one in the taluk, the export of these in Bengal maunds to Madras alone was rice 3,605, paddy 3,223, raggy 1,394, gram 317, jaggery 957, and timber 6,799; the imports being metals 2,131, salt 4,509, timber 804, and every thing else inconsiderable. Much of the agricultural produce goes by road to Vellore and Chittoor. The chief crops raised are rice, rági, sujja (kambu), and jonna (cholum), but most of the other crops, except indigo, are also cultivated.

The taluk, excluding the páliems, contains 326 villages, of which 36 are held as shrotriems. It was, in 1849, composed of the two old taluks of Tirupati and Pennamari, as they were small, and the relinquishment of the Tirupati temple offerings by Government had made the Tirupati Tahsildar's labours light. In the amalgamation the Tumba Páliem and some neighbouring Government villages were transferred from Pennamari to Chittoor. The present taluk contains two divisions, Chandragiri and Tirupati, in charge respectively of a Tahsildar and Deputy Tahsildar, the latter being subordinate to the Tahsildar in revenue but not in magisterial matters. The area of lands cultivable and waste is shown below:—

Description.	Government.		Inám.	
	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Assessed nunjah	6,756	44,000	4,552	26,000
Do. punjah	44,333	50,750	5,988	50,000
Cultivated nunjah	4,948	34,570	3,533	19,056
Do. punjah	8,071	11,608	2,398	2,270
Waste, about	150,000	..	..	..

This does not include the páliems of Kallúr, Pulicherla, Karkambádi, and Krishnápuram, the statistics for which are not procurable. The revenue for five years from Fasli 1281 was—

Fasli.	Wet.	Dry.	Total.
	RS.	RS.	RS.
1281	35,556	16,282	51,838
1282	37,436	17,705	55,141
1283	37,318	17,148	54,466
1284	37,625	17,788	54,813
1285	37,831	17,125	54,956
Average ..	37,153	17,125	54,243

The highest assessment per káni (single crop) is Rupees 10, and the lowest Rupees 2. The dry assessments range from Rupees 6 to Annas 6.

The sources of irrigation for the Government villages are as follows:—

Description.	Number.	Ayacut.	Average Revenue.
		ACRES.	RS.
Government tanks	66	2,184	11,054
Inám tanks	31	1,879	8,460
Government spring channels	151	2,588	22,924
Inám do. do.	57	2,493	13,778
Wells	Unknown.	..	..

One of the most remarkable tanks is that of Rangampet, built between two hills with a bund some forty feet in height. It was for long breached, but was restored about twenty years ago, when the calingula was built so low that it now holds but little water. It used to be supplied by a channel from the Kalliánanadi, which has quite disappeared, and it seems doubtful whether it would pay to restore it. Another tank, that of Sámala, at the head of the valley is a magnificent work, but breached. It has been given over to private speculators, who have not yet restored it. It receives all the water of the Kalliánanadi, and has a large waterspread, now a thick jungle, where good shooting is to be had. The tanks of Pérúr, Tirupati, and Dámalcheruvu are other large ones.

Tirupati[1] *or Lower Tirupati.*—This is the only large town in the taluk, having a population of 10,000. It is the head-quarters of the Deputy Tahsildar, and has a District Munsif's Court. The railway station of the same name is six miles distant on the east, and the Suvarnamukki flows three miles to the south. Being one of the most ancient places in the country, the town is irregularly built, with narrow and dirty streets. Its houses are peculiar in that they are generally constructed with flat terraced roofs like those of the Mysore plateau. Apparently the extent of Tirupati was once greater than at present, for deserted and ruined temples and mantappams are found upon its outskirts, and were it not for the sanctity of the temple on the hills, the place would soon sink into insignificance, for it is from the pilgrims that the residents derive their livelihood. Large numbers of foreigners from all parts of India may always be seen in the streets, as residence on the hills is dangerous. Their presence has thoroughly demoralised the people, the men being accomplished rogues, whose sole object in life is to fleece the pilgrims, and it is said that there is not a modest woman to be found in the town. A late Tahsildar of the taluk describes them as "rude, dishonest, litigious, and with the intention of cheating one

[1] Derived from *Tiru* (holy) and *pathi* (lord).

another. They are not pious at all, and never fear the Almighty's rule and oaths, which the Tirupati people prove satisfactorily. The man who serves the temple on a salary of Rupees 5 per mensem saves monthly Rupees 30 or 40 of his salary by cheating the god's money. Therefore the people think the profession of serving the temples at Tirupati is a good one." In September the town is fullest, owing to the occurrence in that month of the Bramha-utsavam feast upon the hill. In April or May there is a feast in Lower Tirupati largely frequented by people of the district, and called the Gangajátra, the goddess being declared to be the sister of Venkatéswara, the deity of the hills. She has no temple, but in a tope on the east of the town are some stone images representing her head, which are worshipped. On the last day of the feast a figure is made of clay and straw and placed in the tope, where crowds of all castes, including Pariahs, gather and present food (pongal) to it. A number of he-buffaloes, goats, sheep and fowls are at the same time sacrificed, and it is said that Brahmans, though they will not be present, send animals to be slaughtered. When the festivities are concluded the image is burned. During the feast, which continues ten days, the lower orders of the people paint themselves and indulge in much boisterous mirth. "In India," writes the Tahsildar already quoted, "we see nowhere so many disguised forms in any feast. From Brahmans downwards, without distinction of caste, most of the people have the pleasure to disguise themselves in the forms of kings, zemindars, byrágis, &c. The actors dress in the same valuable jewels, clothes, umbrellas, and retinue of the people which they imitate. Those who vow to Ganga, fast ten days before the feast appears. They wear a structure made of bamboo in the form of a car, which is adorned with papers of different colours, and which is supported by iron nails pressed into the belly and back, and with this structure over their heads they play very freely. In this manner four or five hundreds of towers are to be seen. Though nails are pierced into the body, there is no complaint of trouble. The people who are infected with cholera and other diseases vow to Ganga, and observe this." The same festival is celebrated with much less display in many other places in the district, but the Tirupati feast is the most popular. An attempt, strongly opposed by some Mussulmans, has lately been made to imitate these performances in Vellore.

There are fifteen temples in the town, many of them very insignificant. The chief are those of Góvindarájaswámi and Rámaswámi, of which the former has an imposing gópuram. The swámi is said to be the brother of Venkatéswara, and in his honour Tirupati is sometimes called Góvindarájapatnam.

The principal water-supply of the town is derived from a bugga, or spring, at some distance from the town, from which the water is brought through pipes and received into two large stone reservoirs, which are never empty. An endowment for the upkeep of this bugga is in the possession of a Brahman called the 'bugga mahant.'

There are also some good drinking water tanks, the largest being in what is called the People's or Robinson's Park, after a late Collector, who enclosed the space and planted it with trees. The park is ornamented with many fine sculptured images, the numerous ruined temples about Tirupati having been laid under contribution. In the town is a commodious built dispensary lately constructed out of funds supplied by the Tirupati mahant from the revenues of the temple.

The situation of Tirupati is pleasing. The steep cliffs of the Tirumala range look down upon it from a distance of about a mile on the north, while to the south and west innumerable hills extend one above the other to the horizon. On the east the view is more open. A pretty little waterfall, known as the Kapila tírtam, descends from the hill just north of the town, and during the rains the volume of water is not inconsiderable. There is no single fall of any height, but a series of small ones, each with a fall of about 40 or 50 feet, the last and finest being just over a large bathing tank, one side of which is formed by the cliff, and the other three by well-dressed steps of granite leading up to corridors of stone supported upon carved pillars. It is a portion of the duty of every pilgrim to bathe in the Kapila tírtam before ascending the hills, and if he can swim, to go and sit upon a figure of Hanumán over which the water falls. During the great feast crowds frequent the place all day, and in ordinary times there are always several bathers in the morning hours.

The bazaars of Tirupati present a very busy scene. Everything that a pilgrim wants can be procured, and it is a capital place in which, to pick up curiosities which have been brought down from Northern India and bartered with the merchants here.

Chandragiri is the head-quarters of a Tahsildar, and the second most important town in the taluk, having a population of 4,250. Upon the establishment of the new Law Courts in 1805, it was proposed to make this the head-quarters of the District Judge, but Chittoor was eventually selected. The present town is neatly built, on the right bank of the Suvarnamukki, and to the east of the hill upon which the fort stands. The old town has mostly disappeared, and its site, which must have been extensive, has been converted into fertile fields.

Chandragiri is chiefly noted for its fort, built upon a high rounded mass of granite rising about 600 feet above the valley. A large space upon the southern side of the hill is enclosed by strong walls, surrounded by a ditch once fed by a natural spring but now almost dry. The style of architecture is very similar to that of the Vellore fort, which, like Chandragiri, was built, or more probably improved, by the Vijianagar Rajahs. The enclosure upon the plain is divided into three portions by two inner walls running north and south, and in the centre space is the palace of the rajahs. There are two main zigzag entrances, one on the east and another on the west, which as well as the walls, are more or less in ruins. Besides the mahals

are several small temples, the ruined mud walls of the Mahommedan palace, and some mantappams. The mahâls consist of two buildings, one being the residence of the ladies, believed to be connected with the larger building by a subterranean passage. Mr. Chisholm considers the latter to represent seventeenth or early eighteenth century work, and the zenana to be of the early eighteenth century little altered. He thus describes the palace :—" The main building is about 150 feet long. It faces south, with an imposing and well balanced facade of three storeys. The sky line is pleasingly broken by Hindu terminations, like the tops of gópurams, the largest surmounting the durbar hall. This apartment measures 21 feet square. It is surrounded by a colonnade, and rises through two storeys in such a way that the larger quantity of light comes through the upper tier of arches which thus forms a sort of clear storey. * * With the exception of the angles, which are comparatively solid, each floor consists of a pillared hall, the piers arched across both ways forming the supports for the flat domes which ceil the square space."

The lower portion of the building is of stone, and the upper of brick in mortar with only a few pieces of wood introduced. There is a singular absence of ornament on the building, and its appearance leads irresistibly to the conclusion that it was never finished. There are innumerable stone brackets projecting from the walls, intended no doubt to receive ornament, which, as far as can be judged, was never added to them. The zenana was apparently ornamented with stucco by the Mahommedans. The palace is chiefly interesting on account of the fact that here was signed the treaty by which the site of the Presidency town was ceded to the Company.

The hill itself, which is isolated, is encompassed by an inner and outer wall of circumvallation, built of huge granite rocks neatly fitted together. Of the two the outer is the more massive and ornamental, having an embattled wall with small projecting towers, and presenting a very pleasing effect. Where the face of the rock is so steep as to make ascent impracticable, the fortifications are discontinued. Upon the summit are the remains of a few small buildings, and a pool of water. On the eastern side, looking towards Tirumala, is an old gong stand, and upon the crest of the cliff near the holy temple is a similar one. These were erected to announce to the rajah the fact that the swámi had dined, after which he felt at liberty to partake of food himself.

An old palm-leaf book in the possession of one of the village officers of Chandragiri states that the fort was originally built in S.S. 922, or A.D. 1000, by Immidi Narasinga Yádava Ráyalu, one of the kings who reigned at Nárâyanavanam. He "proceeded to Tirupati in order to visit the god, and after accomplishing his object, set about building palaces upon the hills parallel to Séshâchellapárvatam, in sight of which he always wished to dwell." The ruins of his buildings upon the Addakonda hill, including a small fort, are still in existence. He however

soon abandoned this site in favour of Chandragiri. The story says that a kite carried off the rajah's red turban, taking it for a piece of raw flesh, and dropped it on Chandragiri hill. The servants who went to recover it, brought back so favourable an account of the spot that the king regarded the event in the light of an omen, and, "after building a hill fort, as well as one on the plain, he founded a city, and called it Chandragiri, because the moon had here done penance to propitiate Siva."

Ten of the Yádava Rajahs, according to the MSS., reigned for 314 years after Immidi Narasinga Yádava Ráyalu, and then the Vijianagar dynasty took their place. Of these Krishnadéva Maharáyalu "sent a letter to Venkatapathi Naidu, then stationed with a force of 500 men at the gates of the fort, by the hands of Ráchavéti Naidu and Siddappa Reddi, who were each accompanied by 500 men. Venkatapathi Naidu received the letter with great respect, and placed the messengers in possession of the eastern and southern gates." In this manner is the subjugation of the fortress by the Vijianagar king described. Chandragiri became a favourite place of residence with the rajahs, and here were composed among other poems the Manúcharitra, Anuktamalini, Pándavamahá Vijayam, and the Vasucharitra. The great Brahman jester, Tennál Ramadu, was a native of this place, and his descendants still live in Chandragiri.

It was not however until after the subversion of the Vijianagar kingdom that Chandragiri became a permanent royal residence. Venkatapatidéva Maharáyalu, who first retired to Penukonda "on the 28th of Ávani of the year Nandana, left Penukonda and started for Tirupati in order to visit the god. Having done so, in order to be always within sight of the sacred hills, he stopped at Chandragiridúrgam, and as he thought that the fort, as originally constructed by the eleven Yádavas, was not sufficiently spacious for himself and his followers, he caused it to be extended 12,000 yards all round, and erected a double-storeyed house. He had 57 páliems subordinate to him, and departed this life on the new moon day of Badrapádu in the year Nandana."

The place was subsequently seized by the Mahommedans, who erected the trumpery mud palace now falling to decay.

Upon the eastern slope of the hill is a somewhat remarkable boulder called the "ghanta rai," or gong-stone, which, when struck with a mallet or stone, produces a clear metallic sound.

The neighbourhood of Chandragiri is very fertile and the scenery charming. There is much to interest in the shape of deserted temples, grand old tanks, and fine carved mantappams. The town is seven miles to the west of Lower Tirupati.

Tirumala, or the holy hill (*tiru malai*).—This town is generally known to Europeans by the name of Upper Tirupati, and is situated upon the top of the range, and near its south-west angle, being six miles distant from Lower Tirupati, and about as far from Chandragiri. The resident population is only 500. There are four principal approaches

to it, two from the abovenamed towns, and the others from Nágapatla on the west, and Bálapalle on the east. Besides these there are numerous other pathways leading to the plateau.

The range has seven principal peaks, each of them sacred, and each bearing a separate name, accounted for by a fable. Near one of them, named Séshάchellam, stands the temple, and the whole range is often called after this particular peak. There are of course legends innumerable attached to every spot. The hills are said to have originally formed part of Mount Méru, and their change of locality to have arisen from a dispute between Ádi Sésha, the thousand-headed serpent, and Váyu, the god of the winds, as to which of them was the more powerful. To exhibit his strength Ádi Sésha lifted one of the peaks of Mount Méru upon one of his heads, but Váyu raised so terrible a tempest with his breath that the peak was blown away, and falling to the earth formed the Tirupati hills. When this occurred is unknown, but the god Venkatáchellapati is said to have taken up his abode upon the hills twenty-eight yugams before the present Kaliyugam.

There are several tírtams, or pools of water, in various parts of the hills, all more or less sacred. The names of thirty-one can be enumerated, but the pious affirm that there are really three and a half crores of them. The chief are the Pápavinásam, Swámipushkarani, Akásaganga, Tumbúr kóna, Pándava tírtam, Antharaganga and Gógarbha tírtam. The Swámipushkarani is a large tank, about 100 yards by 50 yards, surrounded with cut stone steps and situated close to the temple. Every pilgrim bathes in this, though the green, stagnant, odourous mass of liquid filth which it contains is most uninviting. Once a year the waters of all the principal rivers and lakes of India are asserted to unite together, and on that day the Swámipushkarani is said to be much swollen. Bathing in it at this time is held to be a sure mode of purification from sin. When low, a wall, which separates the tank into two parts, is observable dividing it into the Swámipushkarani proper and the Varáhaswámitírtam. During the famine the bed of the latter was cleared of silt, and nine wells, which were often spoken of, were discovered and cleaned out. The tradition that each became filled with a differently coloured deposit of silt is affirmed to have been found true.

The Pápavinásam is a waterfall and pool about three miles distant from the temple. It is still more morally purifying in its effects than even the Swámipushkarani. Murder, and every other sin under the sun, may be washed away by standing under the fall, which however reveals the extent of the bather's sinfulness, for its waters become dark and foul in proportion to the wickedness of his life. This is persistently declared to be the case even by educated Hindus, and the greatest reverence is felt for this tírtam.

The Gógarbha tírtam is chiefly remarkable for having close to it a circular stone called the "Kshétra bála gundu," or "stone which protects the place." This used originally to be kept within the temple, near

the 'dhwaja stambham' or upright stone pillar before the shrine, and every night the keys of the jewel boxes were placed upon it. It used, it is said, to move about around the building for its protection, and one night it attacked and killed the son of a priest who had been accidentally locked up within the temple walls. For this it was removed to its present position, where parties are in the habit of taking solemn oaths before the stone to settle disputes. The procedure is this: after bathing in the pool, the witness marches to the stone in his wet clothes, with garlands round his neck, touches it, and then swears by the Tirupati swámi. For this a fee of Rupees 7 is payable to the temple, and none are said to be so daring as to tell a falsehood under the ordeal. Many suits in the Tirupati Munsif's Court are settled in this manner.

The Tumbúr kóna is a very interesting waterfall, in the east of the hills, most easily approached from Mámandúr. Here a cañon about a quarter of a mile long occurs, into which the water precipitates itself, and then flows along a smooth granite bed, with some extraordinarily deep circular pools, at intervals, full of fish. The vegetation near the mouth of the entrance to the cañon is very dense, and the scenery charming. Here many rishis used, it is said, in ancient times to live, for which reason the place is sacred. It is now a favourite haunt for tigers and other wild beasts. At one spot is found a cave, probably hollowed out by some of the rishis of past years, which is believed by the natives to lead to a passage conducting to the temple, but as no one is permitted to enter, this point cannot be settled by trial. Another similar opening occurs on the western wall of the colonnade at the Kapila tírtam near Lower Tirupati, by means of which Tóndiman Chakravarti is said to have been accustomed to ascend to the temple. The passage however only reaches for a few yards.

Pathways lead from the town of Tirumala to all of the holy pools. They are generally paved with flat stones, many of which bear rudely cut inscriptions, in various languages, to the effect that a certain person came and visited the swámi. Others have figures representing the pilgrim and his family in the act of prostration. The principal approaches to the town have their pavements almost entirely covered in this way, the idea being that if the dust from a really pious man's foot should chance to fall upon the name or figure, the salvation of the person represented or named is assured. A few stone masons still earn a livelihood by cutting the flag stones for pilgrims.

The most frequented road to the temple is that from Lower Tirupati. All classes may go as far as a large gópuram, which is called Alipiri, but beyond this none but caste men can proceed. About a dozen European officers have passed Alipiri and visited Tirumala, and the desecration of the place by their visits has to be removed by the expenditure of Rupees 105 in various samprókshnas, which consist in bathing the idol with milk, oil, &c., and offering it food. At Alipiri begins a long flight of stone

steps which leads up through a gap in the cliff. The ascent is not very steep, and must be nearly a mile in length. It passes under several small mantappams and terminates at the Gáli gópuram, or 'wind tower,' perched upon the top of the cliff, and deriving its name from its exposed position. A long walk of five miles over hill and dale, along a roughly paved pathway, ornamented at intervals with crumbling and half ruined gópurams, brings the pilgrim to Tirumala. The second approach is from Chandragiri. A good road of about five miles leads to the foot of the hills, and an extremely steep path conducts to the plateau. The steps here are much rougher than those on the Tirupati side, and palanquins cannot be used, as they can when travelling up from Tirupati. The Chandragiri path brings the pilgrim to the summit, within half a mile's distance from the temple.

The town is a most disappointing sight, squalid, mean, and ill-built. It is constructed in the shape of a parallelogram, the four streets running at right angles around the temple, the Swámipushkarani, and the shrine of Varáhaswámi. The latter was the original deity of the hills, and when Venkatéswara came to settle there, he raised objections, but was pacified by a promise that all pilgrims should first pay their respects to him. Every one therefore, after bathing, first offers devotion at this swámi's mean little shrine, on the banks of the Swámipushkarani, and then proceeding to the temple of the usurper, worships there. Most of the buildings are choultries, some of modern construction, built by the Rajahs of Mysore and Cochin and the Zemindars of Kálahastri, Venkatagiri, and others; but the majority are in the shape of long stone corridors skirting the streets and rudely carved. Opposite to the temple are several shops, where brass ware, wooden images, food, and other articles are exposed for sale. A monastery, belonging to the mahant, stands on some rising ground, where byragis are fed. It is a very unimposing building; indeed the only structure really deserving notice is the thousand-pillared mantappam on the skirts of the town which, though it cannot be compared favourably with similar mantappams in other large temples of Southern India, is a fine specimen of native architecture: an extensive hall, supported upon more than a thousand stone pillars, those facing outwards sculptured somewhat elaborately with figures of mounted griffins or horses, and the inner ones of the usual kind, with small carving in relief upon them. It is clear that this mantappam was of much later date than the temple, as the workmanship is of a higher order. It had partially fallen into ruin, when the mahant was lately persuaded to allot nearly a lakh of rupees for its restoration, a work which has been satisfactorily accomplished in spite of difficulties. At one of the corners of the street which runs round the temple is a somewhat remarkable piece of stonework, attributed to Chandra Chóla Rajah. It presents the appearance of a lofty mantappam of stone, but the upper portions of stone wheels just appear above the ground, and the structure is in reality a stone car, which, the

priests say, used once to be dragged around the town. It is impossible to imagine that any thing so heavy could ever have been moved at all, or, if moved, that it would have continued in a state of equilibrium, since the stones composing it are uncemented together.

Around the town is a belt of orchards containing mango, jack, tamarind, orange, sandal, champak, and other trees planted by the pious for the use of the temple. A few byrágis tend the trees and flowering shrubs, sending the fruit and blossoms daily to the swámi.

But little can be seen of the temple from the outside, and no European has yet been allowed to enter its gate. It is surrounded by three stone walls, the outer one being built of well dressed granite blocks, upon which are cut long inscriptions. Rising in the centre of the enclosed space is seen a rather insignificant dome, once gilded, but now much the worse for wear. A poor gópuram surmounts the entrance into the enclosure. This was almost in ruins, but has been repaired within the last few years, when several pots of ancient gold coins were found buried at its base. The size of the outer enclosure is 137 yards by 87 yards, but the shrine from the descriptions given of it must be of mean proportions. It has a small chamber, lighted only by lamps, containing the idol, a standing representation of Vishnu in stone, 7 feet in height. There are four arms to the idol; one of the right hands holds the chakram or mace of war, and one of the left the chank or holy shell. The other right hand points to the earth, to draw attention to the miraculous origin of the holy hill, while a lotus is grasped in the remaining left hand. The divinity is said to have a thousand and eight names, the chief of which are Srinivása swámi, Venkatáchellapati, Venkatéswara-swámi and Séshachellapati; but Hindus from Bengal call him Báláji.

There can be no reasonable doubt that originally the idol was worshipped as Siva. This is denied by none, and the story goes that Ramanjachári, asserting that it was all a mistake, and that the swámi was Vishnu, procured a chank and a chakram of gold, which he placed before the image and closed the temple doors. When they were next day opened these ensigns were found grasped in the idol's hands, which was regarded as a proof that he was Vishnu. The chank and chakram are not portions of the stone image, but are made of gold, and fitted upon the two hands which point upwards. The arrangement of the hair as a "jeddé" or tangled mass, the cobras carved upon the body, and various other peculiarities, prove that Siva was intended to be represented; and the priests, who are Dikshithars, say that they are Sivaites, though they wear the námam. Probably the swámi, who has no consort on the hill, was the bachelor Subramania swámi.

The temple is said to have been built at the commencement of the Kaliyug, or B.C. 3100, when it was prophesied that worship would continue for only 5,000 years, and that the end would be foreshadowed by a gradual decrease in the receipts from votaries. Only twenty years

remain to complete this period, and, if the temple authorities are correct, the revenues show a steady decrease.

A record is preserved in the temple of the benefactions of various kings. The earliest entry states that the second enclosing wall was built by Parikshattu Maharájah, and the next that his son Janméjayya built the outermost wall. Vikramárka Maharájah is described as having made several improvements six centuries later, but the building of the temple is, by all attributed to Tóndiman Chakravarti 'who lived near Kálahastri.' A village called Tóndaimandalam still exists not far from that town. The Brahmanáda Purána also points to the Chóla king as the founder of the temple. It describes a conversation between Nárada Mahámuni and the supreme deity, in which the former said that the most delightful spot on earth was situated "2,000 miles south of the Ganges and 50 miles west of the Eastern Ocean," meaning to describe Tirupati. Then the god said: "In Kaliyuga I am going to be greatly worshipped by Chakravarti, the son of the Chóla rajah, and placed by him in that spot." We may therefore safely conclude that Tirupati has no claim to a greater antiquity than many other temples in the district.

In front of the holy of holies is an anteroom, and in front of this a mantappam supported on stone pillars, in the middle of which is placed a brass vessel in which hangs a bag open at the bottom and suspended from the roof. Into this money and jewels are thrown. On either side of it hangs a gong; that on the left side, when struck, is said to utter distinctly the name "Góvindá," while its companion on the right articulates as clearly the word "Náráyaná."

During the time of the Mahommedans, and probably under the Hindu Governments as well, the revenues of the temple were all paid to the ruling power of the country. The Brahmans however assert that this was an innovation introduced by the Mahommedans, but one of their own fables does not support them. This states that the swámi fell deeply in love with Padmávati, the daughter of Ákásarázu of Náráyanavanam. Being poor, he applied to Kubéra, the god of wealth, for the money necessary to defray his marriage expenses, and received 11,400,000 Ráma tankees (equivalent to twenty or twenty-five millions sterling) upon a bond attested by Íswara, Bramha, and Aswastam, in which he engaged to repay the loan to the sovereigns who happened to rule between the Pálár and the Suvarnamukki. To enable him to fulfil this engagement he received gifts from his votaries. During the first six years of British rule the average nett annual revenue from Tirupati was upwards of two lakhs. In 1843 Government relinquished this source of revenue. The amount had been steadily decreasing, and the average of the last six years was less than one lakh. The mahant states that the receipts of late years have averaged Rupees 2,11,726, and the expenditure Rupees 1,46,906, leaving a balance of only Rupees 64,820. What becomes of the money is a mystery. Much no doubt is pilfered,

and a good deal spent in feeding byrágis, and in the expenses connected with the temple. A very little has been obtained for local improvements, but how much really goes into the temple treasury it is difficult to ascertain.

Sickness and the desire of male offspring are the chief causes which induce persons to make a vow to the Tirupati idol. When the object is attained the vow must be fulfilled at some time, but not necessarily at once. Death only transfers the liability to the surviving heir, and it is said that the idol is never defrauded. There are among Brahmans and other castes, families who are known as " Tirupati dongalu " or Tirupati thieves. None of these will venture even to ascend the hill, and it seems probable, though they pretend not to know the reason of their name, that their ancestors defrauded the swámi by the non-fulfilment of some vow. A very common oblation by women is the hair of their heads, and there is a spot near the large mantappam where barbers shave these votaries, and the hair forms an enormous pile. More than half the women who return from visiting the shrine appear with clean shaven heads. The more wealthy give jewels and money, which should be presented in person, unless sickness or extreme distance renders the journey difficult. To receive the oblations in such cases, and to conduct pilgrim bands from a distance, gósains are appointed in the north of India, and provided with a sacred banner. This they expose some months before the Tirupati festival, and crowds of those desirous to attend gather round it, while persons who are unable to undertake the journey entrust the gósain with their gift. When the time to begin the journey has arrived, the procession starts, the flag going before. Such parties may be seen all over India, the leader every now and then raising the peculiar cry of ' Go-o-o-o-vindá,' which is caught up by his enthusiastic followers. In such veneration is the hill held by foreigners, that upon obtaining the first glimpse of it they prostrate themselves to the ground.

In order to encourage liberality, complimentary presents are given in return for oblations which amount to Rupees 100 and upwards. The presents take the form of turbans and shawls, which are greatly esteemed. Where it is desired to give something which the swámi should retain, such as jewels, a palanquin, or an elephant, it is usual to exact its value in money as well; a custom which originated from the circumstance that the Government of the country received the temple revenues. There are three authorities on the establishment of the temple, the two jiyengárs and the mahant. Of these the big and the little jiyengár are the most holy, and regarded almost in the light of divinities. They are the religious heads, and are supposed to be absorbed in meditation and devotion when they are not superintending the worship. The mahant is the secular head, and looks after the worldly affairs of the swámi. He is always a northern Brahman, surrounded by a crowd of byrágis, one of whom he nominates, during

his lifetime, to be his successor. The importance of this office has greatly increased since 1843. Up to that date Government interfered with every detail of management, regulated the funds, superintended repairs, kept the cars and images in order, and investigated disputes even of a religious character; indeed there was nothing connected with the temple which was not the subject of report, except the daily worship. There was the strongest opposition among the people when it was proposed to withdraw from this, and all sorts of evils were prophesied, which have indeed come to pass. After some discussion the mahant was appointed sole trustee, and he therefore became a most important personage. He is now very old, almost blind, and incapable of much exertion, mental or physical. The result may therefore be imagined. The state of morality among priests and pilgrims is also alleged not to be what it was. Tirupati, unlike most other temples, has no dancing girls attached to it, and not to be strictly continent upon the hills is a deadly sin. Of late years, however, even celibate byrágis and priests take their paramours up with them, and the pilgrims follow suit. Every thing is held to betoken the approaching downfall of the temple's greatness. The irregular life of the mahant Bulram Dás fifty years ago caused a great ferment, though similar conduct now would probably hardly attract notice. He was ejected from his office by the unanimous voice of his disciples, and one Govattam Dás, whose life was consistent with the holy office, was elected and installed in the mhatt near the temple. Bulram Dás, however, collected a body of disbanded peons from the páliems, and arming them, made an attack upon the building. The walls were scaled, and the new mahant with his disciples shut themselves up in an inner apartment. In an attempt at rescue one man was killed and three seriously wounded. A police force was sent to co-operate with the Tirupati Poligars, but could effect nothing until the insurgent peons were threatened with the loss of all their lands. This broke up the band, and Bulram Dás' followers deserted him. When the gates were broken open it was found that he and a few staunch followers had committed suicide.

The principal feast at Tirumala is the Bramha-utsavam, in which the marriage of the swámi with Padmávati is celebrated in September or October. Beginning on the first day of Aswijasudda, it lasts for ten days, and two-thirds of the year's income is realized from the crowds who attend. The numbers are greatest from the third to the seventh day, and when, upon the ninth day, the car has completed its circuit round the town, the people begin to disperse. The most popular procession is the Garuda-utsavam on the fifth day, when a representation of the idol is carried round, mounted upon a figure like a kite. Both Vishnuvites and Sivaites flock to this, and merchants drive a very brisk trade. The feast is particularly popular among the Mahrattas and Guzeratees of Bombay, since their chief festival is the Navarátri, the last day of which, called the Dassera, falls within the period of

the Tirupati utsavam. The merchants of Guzerat are said to lay by a percentage of their profits, and to remit it to Tirupati every year. There are several other periodical feasts, the chief of which are the Sivarátri, the Mukkóti utsavam, and the Radha-Sapthami.

Tiruchánúr.—This village is situated three miles from Lower Tirupati, and upon the northern bank of the Suvarnamukki. Its population in 1871 was 2,262. But little trade or manufacture is carried on in the place, which is only celebrated for its temple dedicated to Alamélu Manganma (a name of Laksmi), the wife of the Tirupati swámi, after whom the village is sometimes called Alamélu-mangápuram. The more common name is a contraction of Tirusukkanúr, or the village of the holy Sukka, and commemorates the fact that Sukka Maha rishi, a celebrated ascetic, did penance here on the bank of the river.

The local tradition states that Laksmi, being displeased with Vishnu, left him and concealed herself in the infernal regions. He visited the earth in search of her, and meeting with Padmávati, daughter of Ákásarázu, of Náráyanavanam, married her as already described. He still however pined for Laksmi, and at length, by excavating a tank with his chakram on the banks of the Suvarnamukki, and doing penance there for twelve years without taking food, induced her to ascend out of the waters of the pool through a lotus flower. She was still unwilling to accompany her spouse to the Tirupati hills, and settled at Tiruchánúr, where all pilgrims who ascend the hills pay her a visit. The tank is considered very holy, and receives a constant supply of water from the river on one side, while it discharges its surplus on the other.

Tiruchánúr has been selected by the Madva Siddhánta Unnahini Sabha, a society for promoting the study of Sanscrit, as the place in which to build a large hall for lectures and examinations. A site just behind the temple has been purchased, but nothing further has been done.

Dámalcheruvu is a large village on the south-west of the taluk, and at the mouth of the valley which leads to the Kallúr ghaut. It is prettily situated among lofty granite hills well clothed with low jungle. Its large tank (whence the name) is fed from a rough anicut built across the stream, and irrigates a large extent of land. A considerable trade is carried on in the village, which has a population of 3,600.

Two miles to the north of Dámalcheruvu was fought, in 1740, the battle between the Mahrattas and the Nabob Dóst Ali. At this spot a peculiar earthen embankment crosses the road and continues over the hills on either side. It is said to extend to Tirupati on the one side, and to Yélagiri, in Salem, on the other, and to have been built long ago by two neighbouring kings to mark the boundaries of their estates.

CHITTOOR TALUK.

Chittoor is the most central taluk in the district, and is bounded on the north by Chandragiri; on the east by Kárvétnagar, and part of Wálájá; on the south by Gudiyátam; and on the west by Palmanér and Punganúr. Its length from north to south is about thirty miles, and its breadth about twenty-five miles. Its approximate area is 483 square miles.

The population according to the census of 1871 was 213,045, of whom 206,518 were Hindus, 6,033 Mahommedans, 371 Christians, and 4 Jains, while 119 were classed as others.

The physical aspect of the taluk is that of a plain, broken by an infinite number of naked rocky hills, which rise abruptly, and are difficult of access, being covered with enormous granite boulders. The plain of the north, out of which these hills rise, is fairly level, but in the south there is a fall of some 500 feet to the level of the Pálár river. The elevation of Chittoor itself is about 1,000 feet above the sea.

The formation of the country is such as naturally to produce an immense number of jungle streams, which eventually form four principal rivers, called the Chittoor, Venkatagiri, Aragunda, and Airála rivers. These generally flow eastwards, where the Poiny, passing southwards, intercepts them and receives their waters, after which it forms the boundary between Chittoor and Wálájá. All these rivers have sandy beds, which only contain water during the rainy season, and are at times impassable torrents.

The taluk contains 635 villages, excluding 84 which are bécharák or deserted. Of the inhabited villages, 210 belong to the Poligars and 16 to Inámdars. The area of the lands cultivated, cultivable, and waste in the Government and inám villages are shown below. Figures for the páliems are not procurable:—

Description.	Government.		Inám.	
	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Assessed wet	21,476	1,33,689	8,169	67,762
Do. dry	98,360	1,13,901	18,702	28,807
Cultivated wet	14,928	98,006	2,285	17,857
Do. dry	33,591	45,542	4,570	68,055
Uncultivable	250,000	..	Unknown.	..

The sources of irrigation are (also in Government villages only) as follows :—

Description.	Government.		Inám.	
	No.	Acreage.	No.	Acreage.
		ACRES.		ACRES.
Tanks	267	15,189	453	5,044
Spring channels	244	5,195	63	37
Wells	9,878	8,692	174	1,401

The number of dasabandam tanks in this taluk is enormous, and most of them are in bad repair. As the valleys are small no single reservoir is of any great size. Half a dozen villages in the east are fed from the Poiny anicut, and small dams or kondams irrigate as many more in other parts of the taluk.

The soil is good, being generally a red clay mixed with sand and fertilized by the vegetable matter and rocky detritus carried down from the hills. These are covered with a scanty scrub jungle, affording abundance of leaf manure, and with coarse grasses upon which many cattle graze. The ryots are mostly of Telugu castes, and are industrious, painstaking cultivators. The revenue paid by them during a series of years is given in the appended table :—

Fasli.	Dry.	Wet.	Total.
	RS.	RS.	RS.
1283	56,729	99,794	1,56,524
1284	59,350	1,04,311	1,63,661
1285	60,240	1,05,770	1,66,011
1286	58,937	1,05,308	1,64,245
1287	58,627	1,05,774	1,64,401
Average ..	58,776	1,04,191	1,62,968

The ordinary crops raised on wet land are paddy and sugarcane, and on dry land rági, kambu, and cholum, with horse-gram upon the poorer soils. The assessments per káni are, for wet land from Rupees 10 to Rupees 2, and for dry from Rupees 6 to Annas 9. Half the ordinary assessment on wet land is charged in addition for a second crop.

About 50 square miles may be said to be the area of the taluk jungles, which are not continuous but scattered about among the hills, the most wooded portions being in the neighbourhood of Airála, Pennamari, Gundlapalle, Pardarámi, Chittapára, and Venkatagiri, the last being in the Bangári Páliem. The trees are small, though large enough for agricultural implements, and afford an ample supply of firewood. In some parts numbers of tamarind trees grow, and their fruit is largely exported. Near Chittapára, Venkatagiri, and Tumba a great deal of

bamboo is found. The jungles are too distant from the railway to be affected by it, and they are therefore not suffering much from overfelling, but jungle fires here, as elsewhere, are very destructive. Many of the Chittoor villages thoroughly appreciate the value of their local jungles, and make arrangements for their conservation. The annual revenue derived from this source is only about Rupees 2,000.

The mineral products of the taluk are the ordinary ones, iron, lime, and building stone, and in addition a soft sort of soapstone called "ballapa rai," found near Narasingaráyanipett, and formed into cups and kitchen utensils, much appreciated by Brahmans, in the villages of Kallijivéd, Mukkanapalle, and Gangádaranellore. The iron was once largely utilized and smelted in the villages of Puttramadi, Vírishettipalle, and Ichanéri, but of late years the industry has greatly declined. Weaving is carried on in a few villages. In Græmespet and Santhapet, suburbs of Chittoor, the fabrics are of a superior quality, but elsewhere only the common kinds of cloth are woven.

Being so hilly, the taluk is infested with all sorts of wild beasts, except tiger, bison, and elephant. Cheetahs play sad havoc among the village herds, but are very difficult to find, though daily heard of. With feathered game the taluk is less plentifully stocked, but peacock, rock pigeon, jungle fowl, and the like are to be got, and in the season numbers of teal and snipe frequent the numerous tanks.

Chittoor is liberally supplied with means of communication, as will appear from the statement given below :—

1.	Chittoor to Vellore	15 miles.	Avenued.
2.	Do. to Palmanér	20 ,,	Do.
3.	Do. to Cuddapah	19 ,,	Do.
4.	Do. to Gudiyátam	17 ,,	Do.
5.	Do. to Pennamari	13 ,,	Do.
6.	Do. to Aragunda	12 ,,	Do.
7.	Do. to Poiny	13 ,,	Do.
8.	Airál to Aragunda	11 ,,	Do.
9.	Branch from No. 1 to Tiruvallam.	16 ,,	Do.
10.	Do. from No. 4 to Airál ..	7 ,,	Not avenued.
11.	Do. from No. 8 to Kotárlapalle	8 ,,	Avenued.
12.	Do. from No. 8 to Tiruvallam	9 ,,	Not avenued.
13.	Do. from No. 1 to Gudipáti.	3 ,,	Do.
14.	Loop road from No. 1 to Chittoor	5 ,,	Do.
	Total length ..	168	

Chittoor (*Chit*, wisdom, *úr*, village).—This town is the head-quarters not only of the taluk, but of the district, although it is by no means the most considerable town in North Arcot, having a population of only 5,500. It was chosen as the Collector's residence not merely on account of its central position among the taluks north of the Pálár, but

because it was close to the estates of the principal poligars, whose lawless conduct caused the Government some anxiety. These have however long ceased to be troublesome, and it has more than once been proposed to transfer the district head-quarters to Vellore, the chief town in the district, which is near the railway and possesses telegraphic communication with the Presidency, whereas Chittoor is nineteen miles from the nearest railway station, that of Vellore.

Besides the Collector, the District Judge, the Superintendent of Police, the Civil Surgeon, Assistant Collector and Treasury Deputy Collector live in the station. It is situated upon the southern bank of the river, and in a valley shut in by high hills, which, absorbing much heat during the day, radiate it at night, and thus raise the temperature to an uncomfortable height in the hot season. In the cold weather, owing to its elevation, Chittoor is a rather cool place.

Besides the public offices the town possesses a district jail, an English church, a native mission chapel, and a Roman Catholic chapel. On the west stands the small square fort, the ditch of which has been converted into paddy-fields, and the walls of which were destroyed in 1801. Within the fort enclosure are the Civil and Police dispensaries, the former a very commodious building. The fort was the residence of the Chittoor Jaghirdar, to whom the poligars were subordinate.

There is not much of interest in the town. No manufactures are carried on in it, agriculture or trading being, besides Government employ, the only occupations of the people. The soil has been found particularly suitable for the cultivation of the mango, and many topes of grafted trees have been planted on the outskirts of the place. Large quantities of the fruit, which is famous, are exported to Madras, and the topes give Chittoor a well wooded appearance. Sericulture was started some fifty years ago by a missionary, Mr. Norris Groves, but it soon died a natural death, and the mulberry trees are now extinct. The scenery of the neighbourhood is very pleasing. On all sides ranges of hills are seen to rise as far as the eye can reach. The shapes of some are very fantastic, and the prospect in every direction is very picturesque. A magnificent view may be had from the summit of one of the highest hills, called Chase's Folly, to which a bridle-path, built by a late Judge after whom the hill is named, leads. Several miles of road have been formed between the hills by convict labour, for the use of residents, and from the town branch excellent roads to all parts of the district.

The native town includes several villages, which have coalesced, and are known under the general name of Chittoor. Upon the opposite bank of the river is a considerable suburb called Santhapet, and about a mile to the west has risen a modern village, Græmespett, around the Collector's cutcherry, which was built in the time of Mr. Græme. Kattamanchi is a suburb on the north, irrigated by a large tank lying close to the European residences.

Not far from Chittoor, on the east, is a village called Vélkúr, reputed

to have once been a large city in the time of Janméjayya Maha Rajah. He was a great admirer of Markandayya Maharishi, to whom he dedicated a temple still standing. These facts are recorded in an inscription upon a stone near the village. Vélkúr is now quite a small place, and only remarkable for its extensive mango topes, but it once contained a thousand houses, and was therefore called in Sanscrit Sahásrapuram, which, translated into Telugu, becomes Vélkúr (*Véyi*, a thousand, *illu*, a house, and *úr*, village). North-east of the village and upon the opposite bank of the river, a large number of ancient stone circles have been found and most of them rifled.

Pardarámi.—This is a considerable place fourteen miles south-west of Chittoor, with a population of 1,600. It is chiefly an agricultural village, situated among hills, and surrounded by a good deal of jungle. Some trade is carried on in grain, jaggery, and ghee.

Venkatagiri.—This is the chief town in the Bangári Páliem, situated about twelve miles from Chittoor, on the road to Palmanér. It has a population of 850, and boasts a pagoda and a fine chuttram. Five miles west of the village begins the ascent to the Mysore plateau at the village of

Muglee or *Mogili*, one of the most sacred in the taluk, though in other respects it is unimportant, having only some 250 residents. Méghalu in Telugu means clouds, and here, the legend states, Indra obtained from Siva the privilege of having the clouds as his vehicle. Siva therefore is worshipped under the title of Abbréswara, the Sanskrit form of Mogiléswara, or Íswara of the skies. The original village was called Mogilivári-palle, about half a mile from the present settlement, and was inhabited by shepherds. One of them, Mogilappa, tended a cow which never gave milk in the evening, and to discover the cause he followed the animal. It led him to a cave which it entered, followed by the shepherd, who, holding by its tail, passed an unfathomable pool of water and found himself in a mantappam within an extensive grotto. Here he saw Párvati milk his master's cow, and being too astonished to retreat with the animal, was surprised by the goddess. To her he described his master's anger at the cow's giving no milk, and thus explained his presence. Párvati sympathised with him, and told him to wish for something. He wished for a good meal, and immediately got a most sumptuous one, which delighted him so much that he asked how he might get the same again. She then told him that he had only to wish and to get it, and making him close his eyes, transported him to his village, first however enjoining him to secrecy on pain of having his head split open. At the spot to which he was transported a spring from that day began to well up, and Mogilappa used it to water his cattle. One day, when digging a hollow in the ground, he found a lingam, but not knowing what it was he cast it aside. Being blessed with the wonderful gift granted to him by Párvati, Mogilappa never fed at home upon the coarse food his wife was able to provide, and she seeing him daily grow stouter marvelled at the

phenomenon, and pestered him to reveal its cause. He told her of the penalty of telling the story, but wearied by her solicitations, he at length agreed to sacrifice himself in order to satisfy her, and told the tale. His head split open, and his wife committed sáti. Some years after this catastrophe a band of pepper merchants camped at the spot, and finding the lingam which Mogilappa had thrown there, used it as a hearth for their fire. This pained Siva's head, and the swámi appeared before the traders, in the guise of a poor Brahman, to ask for a few grains of pepper to cure his headache. Out of pure laziness they said that they were carrying cholum, and the Brahman went away. Arrived at their destination, they found their pepper converted into rotten cholum, and, remembering their lie, they vowed that, were the goods turned into pepper again, they would spend half their profits in building a temple near the spring. The transformation was immediately accomplished, and after once trying to evade the fulfilment of their vow, which was defeated by Siva, they returned to Mogili, found the lingam, recognised its divine character, and built the present temple round it. They also dug a well at the spring, as well as a small stone tank, supplied from the well through a sculptured bull's head. There is now, even in times of the severest drought, a constant flow of water from the well through the bull's head to the tank, and the spring is believed to come from the pool in the cave, five miles distant, where Párvati resided.

Mogili was no doubt a considerable settlement of Linga Baliga or Canarese merchants, who traded between the plains and the plateau in pepper and other commodities. They were expelled by the poligars, and the village has lost all its trading importance, being now a feverish, unhealthy spot, but much revered by the people of the district. Some say that a subterranean passage exists, leading from hills here to the neighbourhood of the Naikenéri ghaut, for fowls which have flown into a cavern in the hills have, it is asserted, made their appearance in the Gudiyátam Taluk, but no one ever ventured to follow them, and even the position of the cave is now unknown.

Aragunda.—This is a flourishing village about fourteen miles north-west of Chittoor, situated in an extremely fertile valley, well supplied with water in the dryest season. The population is about 2,350, and a moderate trade is carried on in grain, jaggery, tamarind and cumblies. It was once a very large place, being a depôt for merchandise passing to and from the Ceded Districts, as Wálájápet was in the last century. When its decay began is unknown, but it is long enough ago to be now embodied in fable. The tradition is that a rákshasa swallowed up the town, and then, fleeing from Vishnu's wrath, hid himself in a rock, two miles from the present village, called *Rákshasa tippa*. Vishnu however placed three lingams, one at Kálahastri, one at Tirupati, and one at Aragunda, and the rákshasa was unable to move beyond the limits of the enclosed triangle. He was eventually caught and punished as he deserved. The country between the three *Siva stalams* was called the

'Trilingadésam,' from which (so the Aragunda folk flatter themselves) the language spoken by them, Telugu or Trilingu, was named. The name of the town is derived from the appearance of the hill close by it, which is thought to look like a mountain split in half: *ara* (half) and *konda* (mountain).

Mélpádi.—This is a village upon the eastern border, which has an ancient Jain temple, now converted into one dedicated to Siva, and considered very holy. The tradition attached to the place acknowledges the original Jain occupation. The four celebrated Brahman poets—Upper, Saminátháar, Sundarár, and Mánikavásager—started for the temple in order to convert it into a Siva shrine by means of their sacred poetical compositions. The Poiny river, which flows hard by, was however in full flood, and they had to turn back. When the flood subsided they returned, singing in Tamil "ini mél pádelám" (we shall sing hereafter); the three middle syllables of the sentence were applied to the village as its name, and the poem, the recital of which converted the shrine into a place fit for the worship of Siva, was to the effect that the moon did penance here to Siva, and made a yágam, which induced the swámi to appear in human form and grant the moon's desires.

This tradition illustrates the mode in which the fables now embodied in the various stalla puránams originated.

Vallimalei.—About a mile west of Mélpádi is another important site of the Jain worship, as appears from the existence of many Jain figures carved upon rocks in the neighbourhood. Some inscriptions also exist which have never been deciphered. The temple on the hill has, like that of Mélpádi, been appropriated by the Sivaites, who have manufactured a story for it. Valli was the sister of Tiruvalluvar, and the daughter of a Brahman by a Pariah woman. Her mother always left her infants where they were born, and Valli was in the usual way abandoned here, but some Védars found and supported the infant, who, when she grew up, was one day sitting on the hill watching a field of grain when Subramania-swámi of Tirutani fell in love with her. He bored a subterranean passage from his temple to this spot, wooed Valli, married her, and lived with her on the hill for several days. In commemoration of this the temple is said to have been formed by one of the Chóla kings. It is built up within a large natural cave, some 40 feet by 20 feet in size, with a height varying from 7 to 10 feet. There are three chambers, all without ornament of any kind. On one side is a small passage to the exterior, now pointed out as that used by Subramaniaswámi. The Jain sculptures are in two spots, one to the north and the other to the south of the temple, and are very well executed, one being of superhuman dimensions. Above the group on the south, the top of the hill has been levelled, and there are traces of walls, which the villagers say formed part of a small fort occupied by Jains long ago. There are clear signs to the east of the road of a large fort which once stood there. The adjoining village is called Kótapattam, a hamlet of Mélpadi. Here without doubt was a

large settlement of the Kurrumbas. At Poiny, (more correctly Ponné), in the Wálájá Taluk, a few miles distant, on the other side of the river, was another fort, and near its site are some very curious examples of cromlechs and stone circles.

Mahémandalam is a small village about two miles west of Vallimalai. It lies at the foot of a high and extensive hill, upon which is built the Mahémandala-durgam or "fortress of the world," so called on account of its great strength. By nature the hill is impregnable upon all sides except the east, which is protected by barriers, formed of loose stones, in addition to the walls of the fort. The fortifications are very extensive and interesting; they are said to have been built by the Mahrattas, from whom they passed to the Mahommedans.

Avála, or Ahirájagiri as the uncontracted name should be, is a village with a population of 900, situated to the north-west of Chittoor, and close to the Punganúr border. The people are all agriculturists, and the place of no particular interest. Adi Sésha, the king of snakes (ahi-rájah), once took up his residence in a cave in one of the hills. As Venkatésaperumáluswámi was roaming about in search of a resting-place, he placed one foot upon the hill, and very nearly squeezed the life out of Sésha, who managed to cry out and ask the swámi to move on. The print of Venkatésaperumál's foot is still pointed out upon the top of the hill.

Púthalpat.—This is a large village, on the Cuddapah road, about ten miles north of Chittoor, with a population of some 1,100, chiefly engaged in agriculture, though there is a little trade carried on. Near here the Airál river unites with the Poiny. On its banks is one of the temples built by the great temple-building Chóla rajah. Púthalpat, and Kallavagunta five miles to the south of it, are both regarded as somewhat sacred places. A Brahman was, the local legend says, many years ago carrying the bones of his mother to the Ganges. Halting at Kallavagunta one night, where the Aragunda river and the Poiny unite, he found that the bones had all mysteriously changed into the buds of the "Kalava" or red water-lily. At Púthalpat next morning he again examined them, and found the buds had opened into flowers (*pú*, flower; whence the name Púthalpat). He did not look at them again until he got to Benares, where he found them bones. He therefore concluded that the river near Kalavagunta was more sacred than the Ganges, and retracing his steps, cast his mother's bones into the river near a rock ("gutta") in its bed, on which is seen the print of Siva's foot. The proper name of the village is Kalavagutta, which is generally altered into Kalavagunta. The bones of deceased persons are even now brought from all parts of the taluk and deposited in the river near this rock.

Náragallu.—This was originally the seat of the Naraganti Poligar, who had a stronghold near it, upon a high precipitous hill which forms a bold feature in the landscape. The fort is now entirely ruined, and the adjacent village of Narasingaráyanipett has for many years been the more considerable place. It is situated upon the right bank of

the Poiny, and is a flourishing agricultural village. In olden times, the people say, the neighbourhood was celebrated for the quarrelsome nature of its inhabitants, which all arose from Naratha Mahámuni, a most cantankerous saint, having lived in a mountain near. It was in the neighbourhood of this village that Hyder Ali died, and a rough masonry platform still marks the spot.

Avolkonda.—This is a village in the western border of the taluk, which is of no present importance, but was once the residence of a jaghiredar, who had a fort upon a hill close to the village, with a strange resemblance to a lion couchant. The descendants of the jaghiredar still live in Avolkonda, and are of very good family, being related to the Nabob Sadatulla Khán. The elder brother of the latter, named Ghulam Ali Khán, was in 1705 granted by the Delhi emperor the jaghire of Vellore with the post of killadar of the fort. He was succeeded by his son Báker Ali, upon whose death the estate was divided between his two sons, Ghulam Rézah Khán and Ghulam Murtuja Khán, more commonly known as Mortiz Ali. To the former, who was the elder, were assigned the districts of Vellore and Avolkonda, with a few smaller ones; while the latter received Chittoor, Dévaghur, and Pavinghur. The brothers however made an interchange of Chittoor and Vellore, and as killadar of the latter place, Murtuja Khán made himself not a little conspicuous during the Carnatic wars. The value of Ghulam Rézah Khán's jaghire was about a lakh and a half of rupees, and its possession was confirmed by Anwar-ud-deen. During Wálájáh's time, however, disputes arose between him and his feudatory, who was besieged in Chittoor fort, and obliged to surrender. Only half of the jaghire, including Avolkonda, but not Chittoor, was continued to him after his submission. In the Company's time it consisted of 27 villages and 18 hamlets, worth Rupees 22,000, scattered over the taluks of Vellore, Tiruvallam, Sátghur, and Pólúr. As the jaghiredar had always proved himself a most faithful ally, every endeavour was made by Government to treat the family liberally, but the Court of Directors were not prepared to make many concessions. The estate was not stated in the original grant to be hereditary, and the Court directed that it should therefore be resumed, and a suitable allowance substituted. The last jaghiredar died in 1848, leaving a son, Hyder Dóst Khán, to whom after some correspondence the three villages around the fort, worth Rupees 3,300, were granted upon a nominal rent of Rupees 100 a year, with a pension of Rupees 1,800, which brought the allowance up to the sum of Rupees 5,000, half of the sum recommended by the Board. Even this the Court of Directors declined to grant in perpetuity.

PALMANÉR TALUK.

The Palmanér Taluk lies on the western side of the district, and is bounded on the west by Mysore; on the north by Punganúr; on the east by Chittoor and Gudiyátam; and on the south-west by Salem. The area by survey is, subject to slight correction, 438 square miles, and the population 60,211, of whom 57,037 were Hindus, 3,076 Mahommedans, and 41 Christians. As the taluk suffered severely during the late famine, and many small villages have been utterly depopulated, probably not more than 45,000 now live in it. It stands upon the Mysore plateau, the general level being nearly 2,500 feet above the sea, and some of the hills attaining to a height of nearly 3,000 feet. The chief of these are Pattikonda (2,908 feet), Bairupallekonda, and Dévarakonda.

The principal river is the Koundanianadi, entering from Punganúr and flowing into Gudiyátam after receiving the surplus of the Dandapalle tank, fed by a Mysore river, and the waters of several other streams. The Goddár or Ambúr river also rises in the west of Palmanér, and discharges down the gorges in the neighbourhood of the Naikenéri pass.

Being so sparsely populated, Palmanér has a large extent of jungle land, but large trees are mostly confined to the eastern portions, where the plateau descends to the plains. Elsewhere large numbers of tamarinds are found, and their produce is one of the principal articles of trade. The commonest tree is the Kánaga (*Pongamia glabra*), which grows luxuriantly, and affords not only oil from its seeds, but excellent manure from its loppings and faded flowers. Forest products are abundant and wild beasts fairly numerous.

The soil of Palmanér is apparently more fertile than that of the two zemindaris which lie above the ghauts, and being heavily manured, produces splendid crops. The chief of these are paddy, rági, sugarcane, and horsegram. The area of the taluk classified appears below :—

	Government.		Inám.	
	Area.	Assessment.	Area.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Cultivable wet	14,350	66,413	3,523	19,119
Do. dry	74,000	81,506	11,679	17,030
Cultivated wet	7,681	35,660	?	..
Do dry	22,498	27,451	?	..
Uncultivable	300,000	..	?	..

The villages are 565 in number, including 34 held as ináms, but most are exceedingly small, some yielding a revenue of only a few annas, and very many having no residents. The taluk must at one time have

been much more thickly populated than of late years, but whether the decrease has arisen from the climate having grown more unhealthy than formerly, or from any other cause, it is difficult to say. Its tanks are many of them large and excellently built. The chief are those of Kiléri, Cuddapanattam, Kallupalle, Dandupalle, Baireddipalle, Jídemákalapalle, and Mámadugu Agraháram. The sources of irrigation are shown in the subjoined statement :—

—	Number.	Acreage.	Assessment.
		ACRES.	RS.
Government tanks	248½	3,467	11,631
Inám tanks	375½	3,855	13,178
Government spring channels	47	372	1,222
Inám spring channels	11	153	776
Wells	415	..	..

The revenue for a series of six years was—

Fasli.	Wet.	Dry.	Total.
	RS.	RS.	RS.
1281	36,143	30,737	66,880
1282	35,138	28,320	63,458
1283	34,816	26,213	61,029
1284	36,030	27,886	63,916
1285	35,896	27,604	63,500
1286	35,714	27,542	63,256
Average ..	35,623	28,050	63,673

The only mineral that is worked in the taluk is iron, which is principally found near the villages of Muddaramdoddi, Chintamákalapalle, Gónumákalapalle, and Nakkanapalle, where it is made into bill-hooks and agricultural instruments of good quality. The other industries are the weaving of coarse female cloths, woollen cumblies, and the preparation of sugar and sugarcandy. The cumblies are woven by the shepherd caste, called Kurruba, who tend flocks of excellent long-fleeced sheep. Considering its population, Palmanér has a liberal supply of roads, viz. :—

1. Chittoor to Bangalore .. .. 14 miles. Avenued.
2. Palmanér to Madanapalle .. 6 ,, Do.
3. Palmanér to Gudiyátam .. 11 ,, Partly avenued.
4. Kuppam to No. 1 .. 27 ,, Do.

making a total of 58 miles; but in Palmanér itself there are several short local roads which are not included in this list.

Palmanér, or Pallamanéri, is the chief town in the taluk, situated at its north-eastern extremity, and not far from the summit of the Muglee pass. It is the head-quarters of the Tahsildar and a District Munsif, and has always been a favourite residence of North Arcot

Collectors, the altitude, 2,247 feet above the sea, giving it a pleasantly cool climate. When travelling to the Neilgherries was less easy than it now is, the town was not infrequently visited by residents of Madras during the hot season, and several excellent bungalows are still standing untenanted. Unfortunately the place is always very feverish for natives, and not infrequently so for Europeans also. The etymology of the name Palmanér is not satisfactorily accounted for. The fort, which was destroyed and levelled about thirty years ago, was constructed by one Savaram Venkatapati Naidu, a poligar whose family has long ago been lost sight of. The town, which has been greatly improved by successive Collectors, is clean and well built, the houses being of the flat terraced description. A busy trade is carried on in the bazaar in grain, jaggery, tamarind, cloths, and cumblies, all of which are also sold at the weekly fair. Owing to the cheapness of jaggery and the coolness of the temperature an arrack and rum distillery has for many years been established in the town. It has a dispensary, travellers' bungalow, and excellent native chuttram. The American Mission and the Roman Catholics have both chapels and schools here.

The scenery in the immediate neighbourhood of Palmanér is rather tame, but in some of the gorges and valleys very pretty views may be obtained. A favourite excursion is to a lovely glen, called the Gangammachitsu (Gangamma's valley), where a small stream falls from a height of about 200 feet into a deep pool shut in on all sides but one by high precipitous cliffs of rock. The vegetation is luxuriant and the spot extremely picturesque. By the side of the Gudiyátam road, and also three miles to the north of the town, are curiosities in the shape of enormous banian trees covering ground upon which a large camp might be pitched. The ghaut road to Gudiyátam *viâ* Synigunta has some very charming bits of scenery, and is well worth traversing. The population of Palmanér in 1871 was 2,193.

Venkatagirikóta.—This town is the head-quarters of a Deputy Tahsildar, and has a population of some 650. It was formerly well cultivated and had a far larger number of residents than at present, but for some years it has been a hot-bed of fever. In 1863 the Collector reported that three-quarters of the houses in the town were in ruins, and the rest only inhabited because they were well built, and he recommended the removal of the Magistrate's Court to Moderálla, three miles distant. In 1865 a transfer was made to Krishnápuram, which proving equally unhealthy, the Deputy Tahsildar returned to his original station. Within the last two or three years the site of the town has been altogether moved to higher ground upon the west, and the health of the people has greatly improved. The new town is well laid out and excellently drained, the work having been accomplished during the late famine as a means of affording employment.

The ruins of a fort of considerable size stand between the sites of the old and new town. It was built by one Venkatagiri Naidu, a poligar who gave his name to the town. An ancestor of this man, named

Nallappa Naidu, some four centuries ago settled at Vógu, five miles to the east, and built a fort, which he called Bairuvánidurgam after his deity Bairudéva. Shortly afterwards he moved about a mile nearer to Venkatagirikóta and built a new village, Bairupalle, and another fort. His descendant, as has been said, founded Venkatagirikóta, where the family ruled until they were dispossessed. When this event happened is not known.

The soil of the neighbourhood is rich, and upon it much sugarcane is cultivated. In a large tope close to the town an experiment was, a few years ago, made in growing coffee. It succeeded at first, but the yield is now very small, probably owing to excess of shade and neglect of pruning. A weekly fair is held here, to which cattle of a superior breed are brought for scale. Sugar, tamarind, and gram are the chief articles of export.

Baireddipalle is a very flourishing village twelve miles to the south-west of Palmanér, and as far from Venkatagirikóta. It has a large tank, under which a large extent of land is irrigated, and carries on much trade in gram, tamarind, jaggery, sugar, and sugarcandy, the last mentioned being here manufactured in large quantities. It has a population of 1,000, many of whom are Kómatis, who seem to be in very well-to-do circumstances, their houses being better built and more commodious than those seen elsewhere on the plateau.

The original village, now called Digavaúr, was formerly called Pillari Gudipálu, which was built some three centuries ago by one Bai Reddi. This man had a son of the same name, who founded the present village, after finding two chests of treasure while he was ploughing. Bodi Kondamma Naidu, the poligar, hearing of the discovery, came down to seize the gold, but cobras immediately swarmed around it and kept him at bay. Bai Reddi, who was a mere boy, advanced to the chests, and the cobras made no attempt to touch him, which so impressed the poligar that he relinquished all claim to the treasure, and helped Bai Reddi to build the village and temple. He also gave him a necklace, which is still exhibited by a lineal descendant, the present monigar of the village, as a proof of the truth of the tradition.

Cuddapanattam, which is about two miles to the south-east of Baireddipalle, was once the most considerable town and the head-quarters of the taluk, which was then called after it. It is now an ordinary cultivating village, having a very fine tank. One of the favourite routes to the plain country used to be through this place, which was consequently called the village of the threshold (kadapa). The actual entrance was at the Thalapulla ghaut, a few miles to the east, across which a wall of defence was built with enormous gates (thalapulu) in the middle. At Cuddapanattam were two forts, one upon a hill and the other upon the plain, both of which were several times besieged by invaders of the Carnatic. Little now remains of them, but what there is goes to show that they could never have been of any strength.

Bápanattam is a small village about four miles east of Baireddi-palle, well worth a visit on account of its extraordinary collection of kistvaens, called by the natives the Pándava's temples (Pándava gudlu). They are found elsewhere in the district, chiefly in the Palmanér Taluk, but are nowhere so numerous as near this village. A few of the kists have been recently explored by Lieutenant-Colonel Bramfil, of the Trigonometrical Survey, who thus describes them :—

"The tombs here are of unusual interest, from the size, shape and arrangement of the slabs of which they are composed, and the rarity of their chief characteristic. The usual kistvaen, or megalithic sepulchral cell, is enclosed by three rings of upright stone slabs, each slab having its top rudely worked into a semi-circular or rectangular shape, and set closely side by side alternately, the round heads standing higher than their adjacent flat heads by the amount of their semi-diameter, *i.e.*, the height of the rounded portion, so as to form a parapeted wall of rounded merlons and flat silled embrasures. These walls or parapets rise in three consecutive tiers, on a slight mound, or cairn, a foot or so above the general ground level. The outer circle or tier consists of some twenty-four slabs, nearly three feet wide, half of them being semi-circular above ground, and standing about 3 feet high, the whole forming a ring fence, or enclosing wall, about 30 feet in diameter. The second tier has sixteen slabs. Eight of them round-headed, rising to a height of 5 or 6 feet above the cairn, or mound, the whole forming an intermediate ring wall, about 22 feet in diameter.

"The third or inner wall is composed of four prominent round topped slabs, 8 to 10 feet wide, and 10 or 12 feet high, above the cairn and 4 or 5 feet higher than the other flat-headed slabs that stand between them, and complete the inner wall, an octagon of some 16 feet in diameter, or rather a square of 12 to 15 feet with the corners cut off. The kistvaen or sepulchral chamber nearly fills up the internal space, the capstone or covering slab of which sometimes projects horizontally beyond the chamber below, so as to fit closely to the four great round-headed slabs that enclose it, the four flat-headed corner stones being only about the same height as the capstone.

"The only entrance to the interior was apparently intended to be by small holes broken in the two or three central slabs on the east front, and nearly opposite to the similar hole in the eastern wall slab of the kist. A kind of antechamber, or closed portico, exists between the inner chamber and the next enclosing wall, provided with a moveable shutter stone, or slab. The stone slabs used throughout are comparatively very thin, being usually about 3 inches thick, and even the great capstones seldom exceed 6 inches. The whole forms an imposing structure, and recalls the idea of a small citadel or fortification.

"There are many examples, perhaps a score or more, of this pattern still standing, and about as many more of a very similar kind, only without the round-headed projections, all the slabs in each ring or tier being of the same height.

"Dividing the tombs into three classes according to size, and counting the fallen and half buried as well as those standing, there are 170 of first, 210 of the second, and 200 of the third or smallest sort, a simple kist, composed

of slabs from 2 feet square and upwards, more or less buried in the earth, and without any enclosing wall or circle of stones remaining. The Nekropolis is much ruined and overgrown by jungle, so that, I suppose, there may well have been more than 600 tombs here within a space of 500 yards long and 300 yards wide. The interments have but a shallow covering of soil, sometimes less than a foot. On excavating they were found to yield the usual sepulchral relics, except that iron weapons were every scarce or entirely absent, while the terracotta coffers were more abundant than in the similar tombs of Mysore. In one a few ornamental beads, similar to some taken out of the Coorg tombs, were found lying near the remains of a human skull. Some of the coffers and sepulchral troughs, or trays, were ornamented with a chain ornament in festoons, and furnished with projecting rings, or loops, and prominent hooks, as if to hang garlands upon. Some were mere small flat troughs, whilst others ranged up to 4 feet long, 2 feet wide and high, and furnished with four or five pairs of legs.

"Perhaps, however, I need only further mention the sole novelty that struck me, and this may be no novelty to others. Two or three Tamil letters were found scratched on the fragments of a little bowl. They seem to spell the word satham or chatham, but the final *m* is very doubtful, and may be intended for a terminal *d* if that were admissible.

"A careful collection and close scrutiny of every fragment of the pottery (which is abundant and of the rude but antique and polished kind) would probably yield some valuable and curious information as to the habits, &c. of the tomb builders.

"I know of but three or four other places where these peculiar rounded slabs are to be seen, but they will probably be found to be more common when looked for."

Naikenéri is situated at the summit of the pass of the same name, and is now almost a deserted village. The trunk road to Bangalore used to pass up this ghaut and on to Venkatagirikóta, about ten miles to the west. At present it is in an impassable condition. Since this route has been abandoned, the *raison d'être* of the village has disappeared, and it will soon follow suit. It has a large choultry used by merchants transporting goods on pack bullocks to and from the plains. Upon the northern hill stands an old fort, called the Peddanaididurgam, which was the stronghold of the Poligar of Cháragal, a village a few miles to the south. From the fact of his holding the key of this important pass into Mysore he became inflated with an idea of his great importance and rebelled, but was taken prisoner at the close of the last century, and his drúg was dismantled. He escaped from prison, and joining the Chittoor poligars in their rebellion, was seized and hanged. A good deal of the fortification on the hill remains, and proves it to have been a place of some strength.

Upon an opposite hill to the south is another collection of kistvaens, very many of which have been broken to pieces and the stones used in building the choultry. There are a few examples of the round-topped stones characteristic of the Bápanattam nekropolis, but the remains are not so numerous as at that place.

WALÁJÁ TALUK.

The Wálájá Taluk is bounded on the north by the Kárvétnagar Zemindari; on the east by the Chingleput District; and on the south and west by the Arcot and Gudiyátam Taluks respectively. The Pálár forms the southern frontier line, and the Poiny that on the west, while the Kortalayár marks for a short distance the eastern border. The area of the taluk is 483 square miles, and the population 216,204, comprising 209,074 Hindus, 6,006 Mahomedans, and 1,124 Christians.

For the most part the surface of the taluk is flat, and the soil more or less sandy, but in the north several hills occur, the outliers of the range which fills the west of Kárvétnagar. The elevation of these is inconsiderable, not being more than about 500 feet above the plain. The Sholinghur hill, upon which is perched a celebrated temple, is the highest and most remarkable. All are particularly destitute of trees or shrubs, and the taluk may be said to have no jungle at all, even firewood being imported from Kárvétnagar or Chittoor. The climate is dry and healthy, and fever is comparatively uncommon.

The present taluk was originally formed into two called Kávéripák and Sholinghur, which in 1861 were combined, and with a few villages of the old Tiruvallam Taluk formed into the present division. It contains 305 villages, of which twenty are ináms. Its lands are classified as follows:—

	Government.		Inám.	
	Area.	Assessment.	Area.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Cultivable wet	58,567	2,80,637	..	..
Do. dry	127,946	1,49,506	..	..
Cultivated wet	48,116	2,33,710	6,589	31,887
Do. dry	70,115	83,963	995	11,097
Uncultivable	200,000	..	..	..

The wet lands are irrigated from the following sources:—

	Government.		Inám.	
	No.	Revenue.	No.	Revenue.
		RS.		RS.
Tanks	1,032	2,10,227	21	19,196
Spring channels	75	35,717	..	..
Wells	10,137	..	..	..

A comparison of the total land revenue derived from the taluk during six years is given below:—

Fasli.	Wet.	Dry.	Total.
	Rs.	Rs.	Rs.
1281	2,55,447	99,938	3,55,385
1282	2,51,919	97,892	3,49,811
1283	2,47,753	1,00,447	3,48,200
1284	2,60,791	1,07,401	3,68,192
1285	2,03,989	92,661	2,96,650
1286	1,18,054	72,038	1,90,082
Average ..	2,22,992	95,063	3,18,055

The largest of the tanks in Wálájá is that of Kávéripák, fed from the Pálár river, which irrigates the lands of twenty-three villages, and produces an average annual revenue of Rupees 33,000. Other important reservoirs are those of Mahéndravádi, Sholinghur, Perangánji, and Nágavédu. How all the tanks could have been at all adequately supplied with water before the construction of the anicuts it is difficult to understand, as they are very much crowded together and each has but a small catchment basin. A fine anicut was, in 1857, built across the Pálár, and another, four years earlier, across the Poiny. These are the two principal rivers of the taluk. The name of the Pálár signifies the 'milk river,' and is by some thought to refer to its freshes coming down with a rapidity suggestive of the boiling over of milk; but this seems unlikely, as the rise of the river is not unusually sudden. One of the sacred legends related of it tells us that Siva being displeased with his riding bull, transformed him into the hill Nandidrúg in Mysore, where the Pálár rises. Nandi prayed to Vishnu, who interceded with Siva, and finally Ganga, who resided in Siva's head, consented to bless the hill by falling upon it in a stream of milk. Thus the Pálár originated, and from its origin is supposed to have the power of purifying from sin.

The most noteworthy feature connected with the river is its anicut. From very early times it was usual for the villagers depending upon the Kávéripák tank to construct a sand bank in an oblique direction, which diverted the waters of the river into the channel supplying that reservoir. This was constantly swept away, entailing great labour upon the villagers and causing much uncertainty in the supply. In 1815 Captain Caldwell, the Superintendent of Tank Repairs, was deputed to inspect the spot and report whether some permanent work could not be carried out. He reported that "the adoption of any project for the permanency of this anicut, even were it practicable, would prove the source of most dangerous consequences, as upon the occurrence of the great freshes so powerful a body of water would be directed down the channel of supply as to involve the destruction of the tank, and not only the loss of the extensive and valuable cultivation under it, but also spread a wide

and incalculable ruin in the country to the eastward." The success of the anicut system in the Godavari and Kistna Districts proved how groundless were Captain Caldwell's apprehensions, and in 1857 the present structure was commenced. It was partially destroyed by floods in 1874, but has been restored.

"The Palar anicut is 2,634 feet long and 7 feet high, having been originally built 5 feet high, it was raised 2 feet in 1863-64. It was as originally constructed provided with 56 under sluices, each 5 feet × 5 feet, the sills being 7 feet below the present crest level. When the centre portion was rebuilt the under sluices in the destroyed portion were not restored, and the anicut has now only 32 under sluices. There are four head sluices, viz., the Kávéripák and Mahéndravádi sluices on the northern, and the Dúsi and Chakramallúr sluices on the southern or right side of the river. The area drained by the river above the anicut is 3,974 square miles; this was ascertained by taking the area off the Trigonometrical map as carefully as possible."[1]

Unfortunately the supply of water in the Pálár is very precarious, the river being sometimes in fresh for two months at a time, and at others being dry for a year or more; but in most years the amount of water reaching the anicut is sufficient to supply the tanks of this district, and in good years it suffices also for those in the Chingleput District which are supplied from the Góvindavádi channel, a branch from that of the Kávéripák tank. All the channels were until quite recently narrow, of irregular breadth, and with a heavy fall. During the famine they were considerably broadened, and the velocity of the water checked by the construction of several drop weirs, which will greatly prevent the silting up of the tanks with sand. On the Wálájá side nearly 40,000 acres of land receive water supplied from the anicut. The assessments are at present very low, averaging Rupees 4-8-10 for the whole series of tanks, and only Rupees 5 under Kávéripák, which gets the best of the anicut supply.

The Poiny anicut was built in 1853, and in its plan resembles that across the Pálár, having channels on either side which supply both the Wálájá and Chittoor Taluks. For the former there are two head sluices, from one of which a channel runs through the villages of Lálápett, Ammúr, and Anandalé, and, filling the tanks on its way, joins the Mahéndravádi channel of the Pálár anicut system north of Kávéripák. From the other a channel proceeds to the Sholinghur tank, and thence through Paravattúr and Jánakápuram into the Kárvétnagar Zemindari. Another branch from this channel passes to Rendádi, and flows into the Perangánji tank, from whence it supplies Súré, Aiyal, Pólipákam, Nágavéd, and other villages. The supply from the Poiny might doubtless be still further extended, but the data have never been worked up. Though a

[1] Report of J. W. Rundall, Esq., Superintending Engineer, in 1878.

smaller river than the Pálár, it is more frequently in flood, and therefore more useful for purposes of irrigation.

The only other stream is the Kortalayár, which rises at the surplus of the great Kávéripák tank, and flowing to the north-east for some twenty-five miles, turns to the north and for ten miles forms the eastern boundary of the taluk. Five miles beyond the border it joins the Nagari river.

The soil of Wálájá is generally poor, being black and red clay mixed with much sand and gravel. The absence of jungles makes the system of farming bad, manure being scarce and therefore dear. The chief crop, since the taluk is so widely irrigated, is paddy, and a very large amount (10,000 tons in 1875) of this grain is exported. On dry lands kambu, rági, and gingelly are the favourite crops. The assessments per káni vary from Rupees 9 to Rupees 2 for single-crop wet lands, from Rupees 15 to Rupees 4-14-0 for double-crop wet, and from Rupees 6 to Annas 8 for dry soils.

The chief mineral product is granite, which is very extensively quarried at Bánáveram and Mahéndravádi, where it is dressed and exported to Madras. Lime is obtained in several places, and earth salt was once manufactured at Kílvídi, as was iron at Koddakal. Both of these industries have, however, been discontinued. The only manufactures are the weaving of cloths and carpets and the dyeing of cloth. Coarse cotton cloths used by the people are produced in very many villages, but chiefly in Sholinghur, Minnal, and Panapákam, and are exported to Madras. In Wálájápet the better kinds are made not only from cotton but also from silk. There is a large community of dyers in this town, where are made and sold thin cotton carpets (jamkánas) and thick woollen rugs, not unlike those of Mysore, the price being very moderate. Painting on cloth is also practised by a few in the town.

Except in its eastern parts Wálájá is very well supplied with roads, which are as follows :—

1. Madras to Vellore	25	miles.	Avenued.
2. Kávéripák to Sholinghur ..	15	,,	Do.
3. Sholinghur to Tirutani ..	3	,,	Do.
4. Ránipet to Poiny ..	14	,,	Do.
5. Ránipet to Sholinghur ..	15	,,	Do.
6. Wálájápet to Ammúr ..	2	,,	Do.
7. Wálájápet to Pálár Anicut ..	3	,,	Do.
8. Pálár Anicut to No. 1	4	,,	Do.
9. Lálápet to Ammúr	3	,,	Do.
10. Arkónam to Pallúr	10	,,	Not avenued.
11. Bánáveram to Mahéndravádi ..	3	,,	Do.
12. Bánáveram to meet No. 5. ..	4	,,	Do.
13. Arkónám to Nágavéd ..	5	,,	Do.
14 Sholinghur to Poiny ..	10	,,	Do.
15. Ránipet to Tiruvallum ..	5	,,	Do.

making a total of 121 miles; but during the famine the following were newly formed :—

16. Nágavéd to No. 1	.. ..	16 miles.
17. Mahéndravádi to Pallúr	..	12 ,,
18. Arkónam to Sholinghur	..	14 ,,
19. Arkónam to Tirutani	..	3 ,,

They are not now in very good order, but will probably be shortly improved, as all are very much needed.

Wálájápet, or as it is more usually called by the natives *Wálájánagar*, is the chief town in the taluk, and the Tahsildar's station. It is situated 68 miles from Madras and 3 miles north of the Pálár, towards which it has a natural drainage. It has a Municipality with an income of about Rupees 10,000, and is a remarkably well built, neatly arranged, and cleanly town, which contrasts most favourably with others in the district. It covers an area of nearly a square mile, and is cut into two almost equal portions by the trunk road from Madras. The streets, which are either parallel with or at right angles to this road, are broad and well drained, many of them having masonry gutters, and all being a pattern of cleanliness. Only two members of the Board are Europeans, who never interfere in the management, since the native members, one of whom is the Vice-President, succeed admirably in carrying out the provisions of the Act by themselves. The town is a modern one, to which fact no doubt the, broadness of its streets and their good arrangement are due. Ráyoji, the prime minister of Mahommed Ali, founded it towards the close of the last century, and called it after the nabob. Its site is on high ground, and it shows signs of an attempt at digging a surrounding moat, which was apparently never completed. The water-supply is ample, twenty-one drinking water tanks being scattered about it, besides nearly a hundred public wells, all attributed to Ráyoji, who also, for the convenience of merchants, built eighteen pettahs or squares, containing convenient shops surrounding a small temple in the centre. In order to tempt merchants from other places, he is said to have exempted the traders of the new town from taxation, which had the effect of producing an exodus of rich Canarese traders from Lálápet, then a large trading centre, but now a straggling agricultural village six miles distant from Wálájápet, and situated in the midst of fine drinking and bathing tanks with other signs of departed greatness. Within a short time Wálájápet became one of the busiest marts in Southern India, and it is recorded that a larger assortment of goods could be procured in it, than in any other place south of the Kistna, except Madras. It carried on a very large trade, chiefly in grains and cotton, with the Presidency town on one side and Mysore and the Ceded Districts on the other. Hundreds of cattle laden with merchandise daily entered and left the town, but now comparatively little trade is carried on. Weaving in silk and cotton, dyeing, carpet-making and the manufacture of oils chiefly employ the people. The

grain trade has travelled to Vellore, and the railway carries cotton directly to Madras from Cuddapah and Bellary. The population is now a little above 12,000.

The public buildings of the town are not remarkable. A moderately large temple, a few good choultries, a meat and a vegetable market, and a dispensary complete the list. The last has been quite recently built by Dr. H. M. Scudder, of the American Mission, from funds raised in the district. It is a fine building, though at present without accommodation for in-patients. On the eastern side of the town is a People's Park, a rather unsuccessful attempt of the Municipality tc supply the public with a place of open-air resort. There is a very good Government Anglo-Vernacular School in the town.

Ránipet is two miles to the west of Wálájápet, and upon the left bank of the Pálár, just opposite to the town of Arcot. Until 1850 it belonged to the Arcot Taluk. It has a population of 2,800, and until 1855 was a military cantonment. In that year the troops were removed, but in 1861 the 41st Regiment occupied quarters here for a short time. In the early part of the century it was a very considerable station, having a large body of European and Native cavalry, besides infantry, quartered in the cantonment. The European portion of the place now wears a most desolate aspect, most of the bungalows being out of repair, and many altogether dismantled. It is at present the head-quarters of the Collector's Head Assistant, a Military Officer in charge of pensioners, and sometimes an Officer of the Public Works Department. Owing to the cheapness of house-rent many European pensioners used to live here, but their numbers are decreasing. In the unoccupied barracks the families of sepoys upon foreign service are accommodated.

The country around Ránipet is flat and open, but to the north a few low hills rise, which differ from those of the rest of the district in that they are not rugged, and being clothed with a thick growth of grass, have after the rains a fresh and verdant appearance. The town was built, about the year 1771, by Sadatulla Khán in honour of the youthful widow of Désing Rájah of Gingee, who committed sáti upon her husband's death. There is a favourite Telugu ballad which describes how Désing Rájah refused to pay tribute to the nabob, and, girt with a magic sword, sallied out to meet him in battle near Gingee. He at first defeated the Mahommedan troops, but the powers of his weapon were only to last for a short time, and when the nabob resumed the contest, Désing, in spite of the utmost gallantry, was overcome and slain. Out of respect for his valour and his wife's devotion, the nabob founded a new village opposite to Arcot, and named it Ránipet. It does not appear to have been of much importance until the place was constituted a European cantonment. It then rapidly extended and absorbed the adjacent village of Hassanalipet. It is an ill-arranged place, with narrow and rather dirty streets, and without any public buildings worthy of remark. The troops have left long lines of barracks, hospital

buildings, store godowns, a church, racquet court, and race course. There is a large Native Christian community, most belonging to the Roman Catholics and the rest to the American Mission, both of whom have churches in the town. There is a large dispensary supported by the Local Funds, but under the management of Dr. Scudder of the American Mission.

Every Friday a very large cattle fair is held on the parade ground north of the town. A larger number of cattle are here bought and sold than in any other place in the district.

About a mile east of Ránipet is a remarkable tope extending along the Pálár for a distance of about three miles. It is known as the Nowlakh bágh, since it is supposed to contain nine lakhs of trees, chiefly mango, orange, cocoanut and other fruit trees. It was planted by one of the early nabobs, and has suffered many losses in the passage of time, many of the trees having died from old age without being replaced. A fine pool of water exists in the centre, from which a channel leads to a broad expanse of paddy land. The local legend states that when Arcot was first occupied by the Mahommedans the country around was covered with woods, which the nabob cut down. The birds that were thus deprived of their nesting-places, flocked to the palace and tormented the nabob with their plaintive cries until he appeased them by planting this extensive tope.

Sholinghur or *Sholingápuram.*—The name of this village is a contraction of the words Chóla-linga-puram, and was given to it because one of the Chóla rájahs here found a natural lingam, and built a temple over it called the Sholéswara temple. It is in the middle of the town and apparently one of the most ancient, though it is not now much regarded. It was here that Adóndai was encouraged by a vision to resume his contest with the Kurrumbas, by whom he was at first defeated. The town of Sholinghur is extensive, and contains a population of about 5,000, most of whom are cultivators, weavers, or oil-mongers. A brisk trade is carried on in the bazaars daily, and at the weekly fair; but it is from its temples that it derives its chief importance. Besides that of Sholéswara, there is another temple within the town dedicated to Bhaktavásala, of fine proportions and a good example of Hindu architecture. It is not very ancient, and was probably built by one of the Vijianagar kings. A noble mantappam, reminding one of those of Vellore and Virinjipuram, has been begun in front of the building, but only the basement is completed, and the elaborately carved pillars lie half buried in the soil. The other chief shrines lie outside the town. The most celebrated is that of Narasimhaswámi, situated upon the summit of the loftiest hill. A flight of stone steps, built by Ráyoji, conducts the pilgrim to the summit, a very cool and airy spot, from whence a magnificent view of the plain country, covered with tanks and cultivation, may be obtained. Pilgrims visiting Tirupati and Conjeeveram generally make a point of visiting this temple and remaining in Sholinghur three or

four days. In April or May there is a large feast in honour of the swámi. The hill is believed to have risen out of the plain at the command of Byréswara, and to have continued rising until it grew so lofty that Indra was annoyed and got Bálaráman to press it down, when it subsided to its present height. There are said to be fourteen holy peaks in the vicinity, but this is the holiest.

At the foot of Ráyoji's ascent is a charitable institution founded by him and called the Annadánam, or rice-giving choultry. He endowed it with lands which the Company resumed, giving instead an annual allowance of Rupees 1,280, now expended by the Local Fund Board. Only Brahmans are fed; the worshippers in the temple, who stay sometimes for six months and sometimes for years, receive a daily dole. Pilgrims get food for the few days of their stay, and on Sundays, in the month of Kárthigay, about two hundred of the Brahmans resident in the town are fed. On the establishment is a púját who daily offers up prayers in the name of the founder, whose sálagráms are placed in the building. Close to the choultry is a very deep well, by some alleged to be as deep as the temple is high. It was dug at Ráyoji's expense.

Upon a lower hill to the east is a temple of Ánjanayya Swámi, which is not so pretentious as its neighbour, but enjoys as wide a reputation. Women thought to be possessed by evil spirits are brought before this swámi to be cured, and his fame attracts a very large number of those who visit Sholinghur. After bathing in a pool half way up the hill, the sufferers enter the temple and sit in front of the image. At last they are said to lose all self-control and to roll about in a frenzy, with dishevelled locks, and uttering incoherent expressions during an hour or two, after which a little holy water is sprinkled upon them and they lie down senseless. Upon awakening they are found to be perfectly sane. Every other disease is also believed to be curable here, the patients spending nights and days in the temple, for a month or more, until the swámi in a dream gives them leave to depart, and then they find themselves cured. It is not unusual for educated natives to adopt this method of treatment, which is presumably only efficacious by acting powerfully upon the imagination.

Another fine temple lies below Narasimhaswámi's hill, upon the plain to the west. It is now in ruins, struck, it would appear, by lightning, and its finely carved columns lie about in confusion. The sculptures possess some merit, and the ruin deserves a visit.

There are very many sacred pools or tírtams about Sholinghur. The chief is the Bramha tírtam, in which people bathe on Thursdays. When Siva tore off one of Bramha's five heads, the latter is said to have come here, and digging the pool, worshipped Narasimhaswámi until his head grew again. When Indradijumna, king of Mandarapuram, fought with certain rakshasas, Náráyanaswámi sent Ánjanayya Swámi to help him, after which Ánjanayya settled on the lower hill and dug the Hanumantha tírtam. All the others, some dozen in number, have

fables attached to them. Valmiki rishi is believed to have done penance at one of them for 87,000 years, after which he was ordered by the swámi to compose his Ramayánam, which he did in this place.

In the neighbourhood of Sholinghur, in 1781, was fought the battle between Coote and Hyder, in which the latter was defeated. Two large Mahommedan tombs by the side of the road on the south of the town mark the spot where the bodies of the slain of the Mysore army were interred in two common graves.

Kávéripák is a flourishing agricultural village lying to the south of the bund of the large tank to which it gives its name. Its population, about 5,700, is chiefly composed of cultivators. There was formerly a small fort near the tank bund, which is now destroyed.

The tank is the most extensive in the district, having a bund about four miles long, stretching from north to south. It has of course a fabulous origin assigned to it, a certain recluse being said to have formed a desire to construct a reservoir at this spot. His piety secured to him the power, for a divinity instructed him to fill an old basket with soil and walk forward in faith. Carrying out his instructions he found that the soil which leaked from the interstices in his basket had been increased so greatly as to form a magnificent embankment. Another legend, which may perhaps have some truth in it, says that in the time of Chenna Bellálen, in S.S. 729, fifty-six kings agreed to join in constructing a great anicut across the Kávéri. One of them, Vikrama Chóla of Cashmere (?), was too late, and his share was divided between the other fifty-five rájahs. When his contribution arrived it was spent in restoring an agraháram, or Brahman village, which Bhója Rájah had caused to be built, but which had fallen to decay in the time of the Jains' rule. The name Kávéripák has of course reference to the anicut across the Kávéri river, for which the money was originally intended.

Upon the tank bund is a comfortable little bungalow, with a pretty view over the water towards the Sholinghur hills. The tank is rarely dry, but has much silted up in the course of years. It is said that there used to be a boulder in the middle of the bed, covered with an inscription, which is now hidden by the deposit of silt.

Mahéndravádi is another village with a fine tank, the date of the construction of which is unknown. It has been a large town, but is now a village containing about 800 inhabitants. Three miles east of it is Kílvídi, so called because it originally formed the eastern street of Mahéndravádi. Not far from the tank are the traces of fort walls, and within the enclosure a small temple excavated out of a large boulder. It bears an inscription which has not been deciphered. The work may be safely attributed to the Jains or Buddhists, who were the authors of other rock cuttings in the district, and perhaps Mahéndravádi may have been one of the fortified places of the Kurrumbas. The tank must originally have been larger than that of Kávéripák, and served

lands some seven or eight miles distant. The bund was enormously high, and might be restored to its original height, in which case a great extent of land could be brought under irrigation.

Arkónam has sprung into importance only since it became a railway junction station. It has a population of 2,500, many of whom are railway employés. The arrangement of the new town near the station is good, and its sanitation fairly attended to. The place is devoid of interest.

GUDIYÁTAM TALUK.

The Gudiyátam Taluk forms a long strip lying upon the northern bank of the Pálár and opposite to the Vellore Taluk. It is bounded on the west by Palmanér, and on the north by Chittoor, while its narrow eastern border adjoins Wálájá, the Poiny river marking the boundary. Its length from south-west to north-east is nearly fifty miles and its average breadth about nine miles; the superficial area being 446 square miles. Its population is 162,980, of whom 147,575 are Hindus, 14,627 Mahommedans, and 878 Christians.

The Eastern Ghauts throw many spurs into the western portion of the taluk, which is therefore composed of hills interspersed with valleys. The Chittoor hills also run for a short distance into the north of Gudiyátam, and the rest, that is, the strip which borders the Pálár, is generally flat. The chief elevations are the Vandranthángal hill, two miles north of the Vellore railway station, the Sátghur hills, Kylásagiri or Ambúrdrúg, and the Nágal or Kódimukkumalei, so called from its fancied resemblance to a fowl's beak. The soil is good, being generally a mixture of sand and red clay; in a few parts a blackish soil resembling black cotton soil is found, and rather more commonly a grey compound of sand and dark clay.

Besides the Pálár and Poiny, which flow along the borders of the taluk, there are various smaller rivers rising in the hills and flowing southwards into the Pálár. The chief of these are the Kounddinianadi, or Gudiyátam river, named after a rishi, and the Goddár or Ambúr river, so called from its poverty in springs—*Goddu* (barren), *ár* (river). These rivers contribute little directly to the irrigation of the taluk, except when in flood. At other times they are dry, but have excellent spring channels. There are 63 of these in the taluk, irrigating 7,662 acres, bearing an assessment of Rupees 36,000. The Poiny anicut feeds five tanks in Gudiyátam, irrigating 700 acres, assessed at Rupees 3,500. The sources of irrigation are shown below:—

—	No.	Ayacut.	Beriz.
		ACRES.	RS.
Government tanks	115	10,365	53,000
Inám tanks	10	109	850
Government spring channels.	225	13,343	82,500
Inám do.	4	160	1,000
Wells	About 3,000	..	..

The chief tanks are those of Cheruvanki (Rupees 3,600), Kávanúr, Kempurájapuram, Kátpádi, Dárápadavédu, Lattéri, and Véppúr. In these there is a good deal of fishing.

The taluk contains 273 villages, of which 179 belonged to the old Sátghur Taluk and 94 to Tiruvallam. The extent of lands of various kinds is shown in the appended table :—

Description.	Government.		Inám.	
	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Assessed wet	22,679	1,32,450	..	..
Do. dry	96,361	1,39,750	..	..
Cultivated wet	18,952	1,14,500	4,266	28,500
Do. dry	60,168	91,200	1,000	18,500
Uncultivable	87,000	..	..	..

The land revenue for a series of five years was as follows :—

Fasli.	Wet.	Dry.	Total.
	RS.	RS.	RS.
1281	1,09,452	99,046	2,08,498
1282	1,16,129	1,03,136	2,19,265
1283	1,16,976	1,00,809	2,17,785
1284	1,21,531	1,07,300	2,28,831
1285	1,10,705	91,963	2,02,668
Average ..	1,14,958	1,00,451	2,15,409

The ordinary crops raised are paddy, kambu, and rági, as well as gram, oil seeds, varagu, and indigo. The assessments are—

	Maximum.			Minimum.		
	RS.	A.	P.	RS.	A.	P.
Wet double crop	15	0	0	5	10	0
Do. single do.	10	0	0	2	4	0
Pattadapáchal (Government wells)	8	8	0	2	12	0
Punjah crops	6	0	0	0	14	0

About 50 square miles of the taluk are covered with jungle which can hardly be termed forest. It is confined to the hill tracts, and produces little timber fit for building, but a good deal fit for fuel, and owing to the immediate vicinity of the railway this is very valuable. The whole is at present under the management of the forest officer, though the proceeds are credited to the Jungle Conservancy Fund. Honey, wax, lac, and medicinal drugs are to some extent collected and brought to the periodical markets for sale. Cheetahs, hyænas, bears, and wolves are not uncommon, and do a good deal of damage to cattle. Some half dozen deaths from wild beasts occur annually.

In iron Gudiyátam is very rich. Lime and building stone are also quarried to a large extent.

The chief manufacture is that of female cloths, which is largely carried on in the kusba town, from a mixture of silk and cotton thread; some are exported to Madras, but most are of the common kind and are consumed in the taluk. In a few villages coarse cumblies are made by Kurrumbas, their value being a little less than a rupee. At Karigiri superior pottery is fashioned out of a white clay. The potter is extremely skilful, and some of his shapes and ornamentation are very graceful. The pottery is often painted a rich green and then glazed.

The following are the roads and the distances within the taluk:—

1.	Tiruvallam to Gudiyátam ..	29 miles.	Avenued.
2.	Gudiyátam to Naikenéri ghaut.	14 ,,	Not avenued.
3.	Pallikonda to Palmanér ..	14 ,,	Avenued.
4.	Gudiyátam to Chittoor ..	10 ,,	Do
5.	Mélpatti to Lálápet	7 ,,	Not avenued.
6.	Branch from No. 2 to Ambúr.	11 ,,	Do.
7.	Gudiyátam to Alinjikuppam.	9 ,,	Do.
8.	Virinjipuram to Railway Station	3 ,,	Do.
9.	Chittoor to Tiruvallam ..	5 ,,	Avenued.
10.	Vallimalei to Tiruvallam ..	2 ,,	Do.
11.	Chittoor to Vellore	5 ,,	Do.
	Total ..	109 miles.	

Gudiyátam.—This is the chief town in the taluk and the head-quarters of the Tahsildar. It includes six suburbs, and has a population of about 10,000. It lies three miles north of the Pálár, and is divided into two portions by the Koundinia river. It is a clean, well arranged little town, most of the houses being tiled, and the streets well laid out. The chief industry is weaving, but Labbays, Vánias, and Canarese merchants carry on a brisk trade, the first in jaggery, hides, tamarind, tobacco, and ghee; the second in grain and oil; while the last keep petty shops and lend out money. All these are very well to do, but the hardworking weavers earn but a scanty subsistence. Every Tuesday a large cattle

fair takes place, which rivals that of Ránipet. Some five hundred head of cattle are usually exposed for sale, besides sundry goods.

The town appears to be a modern one. It has only one temple, built 250 years ago by a Canarese named Hóliappa, in honour of Bálasarathuléswara, or the god who rescued a child from a tiger. The story goes that Hóliappa used to trade in pepper between these parts and the Ceded Districts, and once, when he was returning home, he halted at a spot having a small temple (gudi) and a picota (yétham). Here a tiger carried off his young son, but left the child in a bush near a concealed lingam. Hóliappa out of gratitude constructed the temple, and the town of Gudi-yétham sprung up around it.

Sátghur or *Sátgadi.*—Though a very small place, Sátghur is interesting on account of its celebrated forts. The name is derived from the seven hills upon which are erected as many hill forts, also called the "Yédu Kondala durgam." The jaghire, worth three lakhs, was originally granted by the Emperor Mahommed Sháh to one Hirasut Khán, who, upon the assassination of Sufder Ali at Vellore, acted as naib of the minor Mahommed Ali. When the latter was himself assassinated at Arcot, Anwar-ud-deen sent Hirasut Khán back to his jaghire. He was succeeded by his son and grandson, but Wálájáh removed the latter on account of his being the grandson on his mother's side of Chanda Sahib, and gave him the small jaghire of Kávanúr, worth Rupees 40,000. This was resumed after Hyder's war, and a small pension substituted.

Not much fighting seems to have taken place at Sátghur in spite of its proximity to the entrance of the Naikéneri ghaut. The highest of the fortified peaks rises to a height of 2,367 feet above the sea, the other six being somewhat lower. They all form portions of one mass of hills, and some of them have such precipitous sides as at first sight to appear inaccessible, but narrow approaches exist which are easily defended, and altogether the place is of great natural strength, though the forts are inconveniently scattered and must have required a large garrison. The works are attributed to the Mahrattas, and the existence of some Hindu temples and mantappams, together with the style of the fortresses themselves, show that they were not Mahommedan structures, though signs of Mahommedan improvements are apparent. There are some excellent reservoirs of pure water upon the hills, and some natural hollows in the rocks were ingeniously utilized as powder magazines. A somewhat curious tradition exists, that there stood for many years in one of the forts a figure of Vignéswara, bearing the inscription "Twist the neck and take the money." This was supposed to refer to the sacrifice of a human victim, and no one was willing to earn wealth at such a price; but not very long ago a sharp-witted byrági thought of twisting the neck of the idol itself. He found that it was movable, and that the figuré, being hollow, contained gold coins which he appropriated.

The nabobs of the Carnatic possessed large gardens here, known as the Sátghur Bhágáyetu, full of orange and mango trees. The fruit of the

former was greatly esteemed, and Sátghur oranges still enjoy a wide reputation. Few however now come from this locality, as most of the orange trees have died out, and only mangoes chiefly survive. Grafts originally taken from hence to Vellore and other places now produce the noted fruits. The descendants of the people who used to tend the gardens are almost the sole inhabitants of the village, which contains only a few huts and tiled houses. The scenery of the neighbourhood is bold and pleasing.

Péranámbatt.—This is a large trading town, only second to Gudiyátam in importance. It is a mile distant from Sátghur, which must have originally contributed much to its importance. The population is about 4,200, most of whom are Labbays trading in jaggery, ghee, tamarinds, and hides, which they collect in the Palmanér Taluk, and bring down upon bullocks by the Naikenéri or Thallapulla ghaut. It is a dirty, crowded place, but, being inhabited by so many Labbays, the houses are almost all commodious and tiled, and at the same time much out of repair. It possesses a handsome mosque of modern date.

Tiruvallam.—This is a large town, having a population of 1,300, and situated upon the banks of the Poiny river. Its temple, dedicated to Vilvapathéswara, "the lord of the Vilva forest," is of considerable size, but of no great interest. The native name for the Poiny is the Nílanadi or water river, because its stream is said to have been brought into existence by Vilvapathéswara in order to relieve his waterman from the risk of going far into the jungles, where a rakshasa threatened to devour him. The swámi's consort is also greatly revered under the name of Thanumudiámbal, so called because she has so narrow a waist. The gunta is believed to have been dug by her and is therefore styled the Gouritírtam. It is customary for devotees to worship the deities here with the leaves of the vilva tree. Tiruvallam has a large tank, and agriculture is the chief industry of the people.

Gúd Amúr (Ambúrdrúg).—The village is a very small one, inhabited by a few agriculturists, and the interest of the place is purely historical. Here, in 1749, the Nabob Anwar-ud-deen opposed Mozuffer Jung and Chanda Sahib, and was slain at a spot about half a mile from the village. The fact is commemorated by the grant of a money allowance of Rupees 30 a month to the family of the person who recovered the corpse. A monument covers the reputed spot of the nabob's death; it is of very rude construction, being merely a flat masonry platform, with an upright pillar having a niche in which a light is kept burning all night. The inámdar asserts that Anwar-ud-deen, before his head was cut off on this spot, especially desired that a plain structure of this kind should be erected. A small makám, where Mahommedan mendicants are fed for three days, stands close to the monument.

Near to the village on its western side is the fort, built upon a hill about 400 or 500 feet high, called Kylásagiri after a gandharva named Kylásen, who, in consequence of a curse, was born as an elephant and

lived upon the hill, which is also called the Kushmanda hill. It was at one time a strong fortress, and its construction is attributed to one Moklis Khán, a killadar of the nabobs. The fortifications were improved by the English, but little remains except a few broken walls. The lower fort could never have been of any strength. Its gateway is a small one of brickwork, and its walls, which have been altogether robbed of their revetment, are said to have been faced with only small round stones, roughly put together. Hardly any traces of the ditch remain. Within the enclosure are the unroofed remains of a considerable pile of buildings, but these having been built only of mud, faced with a thin coating of chunam, are crumbling to pieces. The hill is very precipitous, except upon its eastern face, where access is easy. Little remains of the upper works, the main bastion having been knocked to pieces by Tippu's artillery stationed upon an opposite eminence about the same height as the drúg, and partly connected with it, and the rest having been subsequently destroyed. There is a curious cave, of considerable dimensions, at the south-east corner, formerly used as a magazine; also a small Hindu temple and a cannon buried horizontally in a pit, which escaped destruction when all other guns were destroyed a few years ago, and which is pointed out with pride by the people of Gid-Ambúr.

Mahádévamalai.—This village is about eight miles to the east of Gudiyátam, and is regarded with great veneration by the people. A small temple of Máhádéo, or Siva, is built upon the hill close by, and in the rock by its side a few hollows have been cut. The pious, who desire some assurance of their piety, visit this spot and place a little cooked rice, ghee, and milk separately in the hollows. If their devotion be acceptable to the deity, two vultures appear exactly at noonday, bathe in the milk, eat the rice and ghee, and then fly away. These birds are believed never to die, and to come every day from Tirukalikondram, in the Chingleput District, some 100 miles distant, where they are always seen at 10 A.M. They are said to be the abodes of the spirits of two Brahmans, Sambarán and Sampathi, who after successfully doing penance to propitiate Siva, incurred his displeasure by asking for a favour which they did not originally intend to ask for. They were therefore doomed to be born as immortal vultures.

VELLORE TALUK.

The Vellore Taluk is bounded on the west and north by Gudiyátam, from which it is separated by the Pálár; on the east by Arcot; and on the south by the Arni jaghire and Salem. Its length from east to west is about 35 miles, and its breadth about 12 miles, the superficial

area being 453 square miles, containing a population of 179,156, of whom 153,335 are Hindus, 23,032 Mahomedans, and 2,789 Christians.

The northern portion of the taluk which lies along the right bank of the Pálár is flat and open, but most of the rest is covered with numerous hill ranges proceeding from the Jawádis, which occupy the eastern and southern parts. The chief elevations on these hills are Kylásagiri, Periamalai, Chakkilidurgam, and Úchikamalai, most of which are upwards of 2,500 feet above the level of the sea. Many valleys occur between the hills, the most extensive being the Agaram valley; and the soil, composed of rocky detritus mixed with vegetable matter, is extremely fertile. The forests cover more than one-fourth of the total area, and are very valuable, the timbers being teak and blackwood (small but serviceable), vénga, achá, nallamadi, tellamadi, and nammi in quantities, with various other jungle woods fit for railway fuel. All the forests are under imperial conservancy, and a large area has just been reserved in the neighbourhood of Ambúr. The climate of the hills and some of the valleys is feverish, but elsewhere the taluk is particularly healthy.

There are 190 villages in Vellore, of which two are held as inám. The particulars regarding the land are exhibited below :—

—	Government.		Inám.	
	Area.	Assessment.	Area.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Cultivable wet	16,207	1,09,147	..	.
Do. dry	83,188	1,41,890	..	..
Cultivated wet	14,643	98,261	2,246	16,126
Do. dry	56,758	97,998	3,280	6,092
Uncultivable	180,000	..	..	..

The sources of irrigation are—

—	Government.		Inám.	
	No.	Average.	No.	Average.
		ACRES.		ACRES.
Tanks	108	6,773	4	2,345
Spring channels ..	120	8,057	2	161
Wells	9,733	..	..	..
Kondams	2	..	..	..

The tanks are remarkably few in number for North Arcot. The principal ones are those of Chedupéri, Chethuvalay, and Thorapádi.

Besides the Pálár the only other stream deserving of mention is the Agaram river, which rises in the Jewádis and flows northwards to the Pálár, into which during the rains it discharges a very large quantity of water. No anicuts are built across any of the rivers, but the smaller

streams feed several tanks, and have numerous spring channels scooped out of their beds. The Pálár is spanned close to Vellore by a fine bridge built about twenty years ago. It was partially destroyed by the floods of 1874, but was at once restored, the foundations being at the same time extended on one side to a sufficient distance to allow of a light bridge being raised upon them to carry a narrow-gauge line of rails, which it is proposed some day to lay down in order to bring Vellore town into direct communication with the station four miles distant. The soils of the taluk are in the valleys rich loam and red and black clays mixed with sand and gravel. In the level country the proportion of sand becomes greater and the fertility less, while in some parts a great deal of soda and salt occurs and makes the ground barren. The chief crops are rice, rági, cholum, kambu, varagu, indigo, gingelly, horsegram, and ground-nut. Fruits of various kinds are grown, and the village of Ussúr in particular, about six miles south-west of Vellore, is noted for its grapes, which are exported to Madras and sold at railway stations along the line. The assessments for wet crops run from Rupees 15 (for a double crop) to Rupees 3-4-0, and for dry lands from Rupees 6 to Annas 6 per káni. The revenue for a series of years is shown below :—

Fasli.	Wet.	Dry.	Total.
	Rs.	Rs.	Rs.
1281	98,997	1,06,210	2,05,207
1282	98,027	1,03,664	2,01,691
1283	96,582	91,576	1,88,158
1284	93,794	99,812	1,93,606
1285	88,042	88,987	1,77,029
1286	70,480	82,362	1,52,842
Average ..	95,434	90,988	1,86,422

The trade of the taluk is very great, chiefly in grains and jaggery, and the larger proportion is confined to the kusba town, whence the produce is mostly exported to Madras and Beypore. In 1875 the exports from the Vellore station to these two places alone were in rice 18,000 tons and in jaggery 3,000 tons. A good deal of forest produce is also exported, particularly bamboos, those cut in this taluk being celebrated. The Malayális who inhabit the Jewádis gather much bark, lac, honey, and wax.

Besides iron, lime, and building stone, which are common, saltpetre is found in some parts of Vellore, and was until a few years ago manufactured to some extent. Iron is only worked slightly in the villages of Pákam and Pákampáliem. The industries are cloth and koré mat weaving, the making of brass vessels, and the manufacture of paper, indigo, and gunny. Common cloths are produced in very many places, but notably in Vellore, Ambúr, and Pallikonda. Koré mats are made chiefly at Pallikonda and Agaramchéri by Labbays and Agumadis.

The manufacture of brass utensils and plates is almost confined to Vellore, where several hundred Kammálas are employed in it. Paper was once largely produced, but the industry is gradually dying out. Gunny is made in Pallikonda by Janapas, and indigo is produced in many places, but largely in Vellore town itself.

The taluk is fairly supplied with roads, which are shown below :—

1. Madras to Bangalore	45 miles.	Avenued.
2. Vellore to Arni	14 ,,	Do.
3. Road joining Nos. 1 and 2 ..	11 ,,	Not avenued.
4. Kannianbádi to Thellay	3 ,,	Do.
5. Vellore to Thellay	16 ,,	Do.
6. Abdullápuram to Salem frontier..	19 ,,	Do.
7. Cheddapéri to Ussúr	3 ,,	Do.
8. Thorapádi to Ussúr	2 ,,	Do.
9. Chellamanattam to No. 2 ..	3 ,,	Do.
Total ..	116 miles.	

Vellore is the largest town in the district, having a population exceeding 43,000, and carrying on an enormous trade in grain, but almost every thing else can be purchased in its bazaars. It is often called by the natives Ráyavélúr, to distinguish it from Elloro, in the Godávari District, which is known as Uppuvélúr. The original settlement was Vélapádi, now a suburb, which derived its name from the circumstance of its being situated in the midst of a forest of vélan or babool trees. Vellore similarly signifies the village of babool trees, and the prefix Ráya was added in consequence of its becoming a stronghold of the rájahs of Vijianagar.

The town, which includes ten small villages, stands about a mile to the south of the Pálár river. On its east rises a short range of bare hills, some 500 feet above the level of the plain and running from south-east to the north-west. At their north-west extremity is the late cantonment, with the native town or pettah between it and the base of the hills. Further south are the houses of the European residents, arranged on either side of the trunk road to Arni, which runs through the town. Most of the houses in the pettah are tiled, well built, and cleanly whitewashed. The streets are generally broad, clean, and regular, with stone or masonry drains upon either side of the more considerable ones. The town has a rather flourishing Municipality, which spends annually about Rupees 45,000 upon sanitary and other works. It is pleasantly situated, with hills upon all sides, and has many topes of graft mangoes, oranges, vines, cocoanuts, and other fruit trees within it and on its outskirts. The cultivation of sweet-scented flowers is one of the industries of the place, and many bales of these are daily sent by rail to the Presidency.

The chief object of interest is the fort and the temple within it. The

former is one of the most perfect specimens of military architecture to be found in Southern India, and the latter has a few carvings which by some are thought to rival those of Madura. "The fort is traced on an irregular four-sided figure. The fortifications consist of a main rampart, broken at irregular intervals by round towers and rectangular projections. Below this there is a fausse-braie, ornamented at intervals with machicaulated turrets; there is a broad wet ditch, varying a good deal in width in different parts, but not laid out in conformity with the trace of the works. There is a solid masonry counterscarp and covered way round three sides. On the north side the covered way no longer exists, as the high road to Salem runs along what would originally have been the crest of the glacis. The main walls are built of massive granite stone, admirably cut to point and fitted together without mortar. The upper parapets are built of, or lined with, brickwork in which the embrasures are cut." This is evidently the work of European engineers at a late period of the fort's history. "The parapet of the fausse-braie is of solid stonework, the upper row of stones being cut to a semicircular shape, and thus presenting an ornamental appearance, as well as affording loophole defence. The counterscarp is strongly built of stone in chunam, the crest being at present finished off with brickwork plastered over. The counterscarp on the east front is broken by a berm about seven feet below the crest, which is carried partly round the south front on the same level and then drops several feet lower, at which level it is carried round the west on to the north face and there ceases. On the south face there is a raised bastion on which the flagstaff stands, and there are also two small round towers, raised above the main works, at the south-east and north-east angles. There are no outworks, caponniers, galleries, or traverses. The old entrance was by a winding roadway with massive gates, and protected by a drawbridge; but of late years a straight road has been cut through the rampart. On the south side there is also a footway which crosses the ditch on a stone causeway. There is no other means of entrance across the ditch."[1]

The ditch is supplied with water by a subterranean drain connecting it with a large bathing tank called the Súriagunta, which receives all the drainage of the hills lying east of the town. Formerly the ditch was tenanted by several large alligators, but all have gradually disappeared, shot, it is said, by officers living in the fort. Quite recently (March 1879) four young ones were brought from the Palmanér Taluk and let free in the water, where they are occasionally seen.

Vellore fort is believed by many to exhibit clear signs of having been laid out by Italian engineers, but according to local tradition it was built by one Bommi Reddi (or Naidu), a native of Bhadráchalam, on the banks of the Kistna. He and Timmi Naidu were the sons of one Yádama Naidu of that place, and left their native town in order to

[1] Report of Station Staff Officer.

escape from their half-brothers, who had plotted to murder them and take their property. They were journeying to Raméswaram and other holy places, when they halted one day at Vélapádi, and pleased with the neighbourhood, applied to Rájah Karikála Chóla, who lived in a large town called Kylásapatnam, five miles south of Vellore, for permission to settle there. This was granted, and the brothers betook themselves to the breeding of cattle and got very wealthy. At last a petty chief, who held Arni, attacked them, but was utterly defeated, which so pleased the rájah that he gave Bommi Reddi many presents and privileges.

The tradition regarding the circumstances which led to the construction of the fort and temple is of course mythical. Bommi Reddi had a cow with five teats, which, he once discovered, used to suckle a five-headed cobra that lived in an anthill in the middle of a pool of water. The reptile was Siva, who in a dream communicated to the Reddi the position of some hidden treasure, and directed him to use it in building a temple. The treasure was found, as well as a lingam, and the temple was begun on the 19th of Panguni in Sukla year, S.S. 1195 (A.D. 1274),[1] the architect being a native of Battarikasiamam somewhere in the north of India, who had come down south to visit its temples. The outline of the walls was shown by a prodigy; a hare chased the Reddi's dogs around the anthill, and Siva cried out from the sky, that the line traced by the course then run should be followed by the builders. Within exactly nine years the temple was completed and dedicated to Jalakantéswara or Siva residing in the water.

Meanwhile the architect's son had set out to search for his long absent father, and found him at Vellore. He admired his work, but announced that the temple would be unlucky, as the 'lagnam,' or hour in which it had been begun, was inauspicious. He discovered a fortunate lagnam, and in it began the fort, upon which enormous numbers of workmen were employed, and for which, it is said, stones were brought from Pallikonda, 13 miles distant. When all had been finished, so the story goes, Siva in a dream ordered Bommi Reddi to hand the fortress over to Venkatadéva Maharáyalu of Denganikóta. He did so in S.S. 1216 (A.D. 1295), and the place was in consequence called Ráyavélúr. The chiefs who reigned at Vellore are according to the local MSS. the following:—

Venkatadéva Maharáyalu	.. ..	A.D. 1295
Krishnadéva Maharáyalu	.. ..	,, 1325
Vásudéva Maharáyalu	.. ..	,, 1355
Aswadéva Maharáyalu	.. ..	,, 1385
Venkatadéva Maharáyalu	.. ..	,, 1400

[1] On the walls of the temple of Malliambatt, in the Gudiyátam Taluk, is found an inscription which serves to fix the date of Bommi Reddi. It records the fact that the temple was built by "the Great Lord and Poligar Venkata Bommi Náyani Lingamma Naidu" in S.S. 1320 or A.D. 1398. As the Lingamma Naidu was evidently the son of Bommi Naidu, the latter could not have built the temple much earlier than the middle of the fourteenth century.

Vásudéva Maharáyalu	.. ..	A.D. 1428
Krishnadéva Maharáyalu	.. ..	„ 1446
Aswadéva Maharáyalu	.. ..	„ 1460
Prabhadéva Maharáyalu	.. ..	„ 1488
Vásudéva Maharáyalu	.. ..	„ 1526
Venkatadéva Maharáyalu	.. ..	„ 1557

This rájah is stated to have had, by a maid who lit the palace lamps, an illegitimate son named Krishnadéva ráyalu, of whom he was very fond. He was, however, persuaded to have him put out of the way. The child was handed over to two menials, a dhoby and chuckler, who were directed to destroy his life. He was notwithstanding saved by these two persons, and in A.D. 1586 ascended the throne, and gave to his protectors two forts in the neighbourhood of Vellore, still called the dhoby's and the chuckler's forts.

About the middle of the seventeenth century the Sultan of Bíjapúr seized Vellore, and its first Mahommedan ruler was one Khán Khán, who was succeeded by Mahommed Khán. This man's son murdered a dancing girl of the fort temple, and so caused service there to cease and the idol's jewels to be concealed. There are at present wonderful rumours regarding these jewels, which were more probably seized by the Mahommedans. Abdulla Khán succeeded Mahommed Khán, and in his time (A.D. 1676) the Mahrattas, under one Thukoji Row, besieged the fort for a very long time. Thukoji Row noticed blood coming out of a stone in the village of Chémbákam, a mile distant from Vellore, and learning in a dream that the stone was the god Chelvavináyager, he built a temple in that village to the swámi, where service is still carried on. The swámi instructed him to perform a 'sarpayágam' on the banks of the Pálár, which he did after building a Vishnu temple and brindhávanam close to where the bridge now stands. The result was that a plague of cobras occurred in the fort, and Abdulla Khán, giving up possession, retired to a spot about two and a half miles west of Vellore, where he built a town which he called Abdullápuram, and a palace, the ruins of which still stand on the southern side of the Bangalore road.

Thukóji Row reintroduced worship into the fort temple, and was succeeded by his son Sinkóji Row, who was attacked by Zulfikar Khán, and besieged for two years, after which time he received one hundred and fifty thousand gold coins, and gave up the country to the invader. Worship again ceased until after twenty-one years, when a Mahratta, Srinivasa Row, laid siege to the fort for three years and took it. He reigned seventeen years, and his son Ráma Row for thirteen, after which Daud Khán came from Delhi (A.D. 1708) and ousted the Mahrattas. Shortly after this Arcot was built, and Nabob Sadatulla Khán gave Vellore and the neighbouring country in jaghire to his brother Ghulam Ali Khán, who was succeeded in Vellore by his son Báker Ali. This prince during a famine established and endowed a langerkhána, which is still continued, the funds being now disbursed by the Municipality. Murtuja Khán, his

son, was the next killadar, and he was dispossessed by the Nabob Mahommed Ali.

In the centre of the fort there is at present a parade ground surrounded by the mahâls occupied by the family of Tippu, and various houses once occupied by the European officers of the garrison. There used to be a large excavated tank in front of the temple, and the rest of the space was covered with streets containing bazaars, while in the north-west corner, where the hospital now stands, was a populous Hindu village. Four broad streets ran round the interior of the fortress, along which the idol's car was annually dragged with great pomp and ceremony. When all these features disappeared seems uncertain, but it was probably before the beginning of the present century.

Of the houses once tenanted by officers one is now occupied by the Sub-Collector, while the rest are used as District Munsif's Court, Pension Office, Telegraph Office, and Christian girls' school. The old European barracks have been converted into a civil dispensary. The mahâls are five in number, viz., the Gumsûr, Kandi, Tippu, Pátchá Bégam, and Pálkonda mahâls. They contain no State prisoners, but are occupied by several Kandian pensioners, some descendants of Tippu's relatives, the ex-Pálkonda Zemindar, and a few others. One is used as a Forest Office and another as an Engineer's Office. There is an open space in the line along which the mahâls are built, which is now occupied by the English church constructed thirty years ago. It covers the site of the old palace of the Vellore killadars, which perhaps displaced that of the Hindu rájahs, for no traces of this now remain, nor does any tradition exist regarding its position. The killadar's palace was removed within the memory of persons still living in Vellore.

The temple, which for many years was used as an arsenal, stands near the north-east corner of the fort, and is a most interesting structure. The entrance is topped by a fine gópuram with massive gates and rich carvings. Among other figures is one representing the portly Bommi Reddi, who founded the fort. The shrine is enclosed within an inner line of walls, having a low gópuram over the entrance. It has nothing very remarkable about it, the carvings being rude compared with those in the outer enclosure. This is flanked by long colonnades supported upon carved pillars; but the most exquisite sculpture is found in the Kalliána mantappam, or hall in which the idol was placed when his marriage was yearly celebrated. It stands on the left-hand side on entering, and contains monolithic sculptures of marvellous beauty. The outer line of pillars represents mounted figures elaborately worked. In the mouth of one of the animals is a ball of stone which can be freely turned within its jaws, but cannot be extracted. The cornice running round the roof is probably the most elaborate thing of its kind in Southern India. The centre of the hall is supported upon huge monoliths cut into groups of five pillars, joined by thin stone panels fretted with graceful patterns. The five pillars and the four joining panels are carved out of

a single stone, and how the work could have been executed without fracture seems a marvel. Each pillar has upon its faces figures from one to two feet in height, well proportioned and magnificently chiselled in very high relief, the limbs standing clear away from the back ground. The two ornaments of the roof are particularly striking, representing three circles of parrots hanging, heads downwards, and holding in their beaks and claws the open petals of a lotus flower. Each is carved from one large stone, and the delicacy of the execution is most remarkable: indeed every stone in this extraordinary building is well worth notice. It is said that the East India Company proposed to send the mantappam to the Prince Regent, to be erected at Brighton, and that each stone had been carefully numbered, with this object in view, when the vessel which was to have carried it to England foundered and the design was abandoned. It would certainly excite much admiration in England, but here little notice is taken of it. Until quite recently disfiguring walls were built between the pillars in order to form an office for the Station Staff Officer, and Commissariat bullocks were tethered to the delicate carvings, which they seem to have broken with their horns or hoofs, as many fractures, some of them recent, are observable. Now the Station Staff Office has been removed, its walls pulled down, and the whole mantappam more or less cleaned up. The work of removing whitewash which conceals much of the delicacy of the sculpture has been found difficult.

Compared with the Kalliána mantappam no other sculptures in the temple are deserving of notice, but a well near the north-west corner is curious. It is attributed to Krishnadéva Ráyalu, and has a stone doorway at the side, opening upon a centre pivot. This is usually below the water level, but during the famine of 1877-78 the well became almost dry, and then the Station Staff Officer's clerk had the curiosity to descend and explore. Fear of evil spirits deterred others from following him, and his observation seems to have been somewhat hurried, but he states that the passage led into a spacious subterranean mantappam, supported upon stone pillars, and with a door leading to some further passage, which he did not examine. It was probably a tunnel leading to the Pálár, from which river this well receives its supply. The popular belief is that the temple jewels lie concealed in this subterranean mantappam, and are guarded by a malignant evil spirit. The level of the water is now unfortunately too high to admit of examination of the building by the curious, and the supply is too copious to allow of the well being emptied.

Upon the southern glacis of the fort is the place of arms and parade ground, now used by the Native Infantry Regiment which is always quartered at Vellore. The military hospital stands in the middle of the pettah, and more than a mile to the south is the central jail, in which cloths, carpets, and koré mats are woven, and various other industries carried on.

On the western side of the Arcot road and within the limits of the suburb named Arikandampúndi, are the tombs of several members of Tippu's family, which are of pleasing design, though only built of brick-work plastered over. In 1805 about 15 acres were granted by Government, at the request of Tippu's sons, as a burial-place. The applicants were however not buried here, as they were removed to Calcutta in the following year, in consequence of the Vellore mutiny, but the female members of the royal family were allowed to remain in the fort maháls. Of the 15 acres granted less than three acres are now covered by their tombs, the rest of the land being given out for cultivation, and the rent used for the repair of the tombs. The chief monuments are those erected over the graves of the following persons :—

Bakshi Bégum	Wives of Hyder.
Fáthma Bégum	
Bátcha Bégum	Wives of Tippu.
Ahmed u nissa Bégum	
Rahimat u nissa Bégum	
Fáthma Bégum	Daughters of Tippu.
Shahzáda Bégum	
Mirza Rajá Hossein	Son-in-law of Tippu.
Manaver Bégum	Daughters-in-law of Tippu.
Amir u nissa Bégum	

There are besides some four hundred minor tombs of connections of the family, servants, eunuchs, and other dependants.

Either owing to the exposed position of the Vellore fort or to the natural love of the Hindu of building drúgs, three of the peaks upon the range of hills overlooking the town have been fortified, and the drúgs are known by the names Sajjarowghur, Gajjarowghur, and Mortizghar. Of these the first is the largest and most southerly, and the last the smallest and most northerly. Sajjarowghur and Gajjarowghur were, as their names imply, built by the Mahrattas, and Mortizghar by the last killadar of Vellore. The pettah at the foot of the hills was encompassed by a wall, and connected with the hill forts by lines of fortification. Another wall and fosse were carried from the hills to the margin of the Pálar, having a gateway where it crossed the Arcot road. The drúgs are now much dismantled, and the other works, except the fosse near the Arcot road, can with difficulty be traced.

Pallikonda.—This place was at one time of considerable importance as the head-quarters of the old Vellore Taluk, but since the removal of the Tahsildar's office its prosperity has declined. It has a population of 2,000, and still carries on a good deal of trade, which of late years has passed chiefly into the hands of Labbays. The manufacture of gunny is here carried on to a great extent. The town is situated upon the southern bank of the Pálár, just opposite to where the Gudiyátam stream unites with that river, and upon its southern side rises a high granite hill The town is fairly well built, but is chiefly celebrated now

for its temple of Ranganáyakaswámi. The legend is to the effect that Brahma, forsaking Saraswati, proceeded to make a yágam at Conjeeveram, when she transformed herself into a flood (the Pálár river) and flowed towards the yágasála, intending to extinguish the sacrificial fire. Brahma prayed to Vishnu, who tried to obstruct the river by standing in front of it, but the stream merely took another course, seeing which the swámi lay down across it, and thus dammed up its waters until Bramha had completed his yágam. Hence the town was called Pallikondai, "you lie down," but a sacred name for it is Ádirangam, rangam signifying island. The idol is called Ranganádar, a name applied to the deities of Tirupákadal (Madiarangam) and Srirangam (Anthiarangam). Of the three places Pallikonda boasts of being the most ancient, while Srirangam is asserted to be the most modern. The Bramha-utsavam feast takes place in April or May.

Ambúr, or *Amúrpéta*, is after Vellore, more than thirty miles distant, the largest town in the taluk, and has, including Krishnápuram, which is practically a part of the town, a population of nearly 10,000. A very large proportion of the residents are Labbays, who almost monopolise the trade, chiefly in grain and fruits. The town lies upon the south bank of the Pálár, and has a most fertile soil well watered from the river. Very many topes of cocoanut and other fruit trees have been planted on its borders. The Ambúr railway station is within half a mile of the town, and an excellent road passes close by, connecting it with Vellore on the one side and the Salem District on the other.

The name Amúr is supposed to be a corruption of chámur, a deer, Krishnápuram being similarly the modern form of Kristnasáren, described as a giant who lived here in olden time, but who was, more probably, one of the early chieftains of the neighbourhood, perhaps one of the Kurrumbas. There was very many years ago a large fort at Ambúr, but nothing save the tradition regarding it survives. The local myth asserts that Kylásen, a gandharva, was cursed by Márkandaya Maharishi because he made fun of him, and being born as an elephant, lived on the Ambúr fort hill, four miles to the north. Siva promised to restore him to his former condition if he would destroy Kristnasáren, who, during the day, used to take the form of a beautiful deer (chámur) and allure people into his jungle retreats, where he devoured them. Kylásen killed the giant and became a gandharva again. He is now worshipped at Ambúr under the name of Nágéswara, nága signifying elephant.

The town is probably one of the most ancient in the district, but its importance in modern days only dates from some thirty or forty years back, when the Labbay traders began to settle here and opened up a brisk trade with the Mysore plateau. Most of the town is new, and the houses tiled and well built.

Virinjipuram is situated about eight miles west of Vellore, and contains less than 3,000 inhabitants. It is divided into two parts, Northern and Southern Virinjipuram, separated by a broad stream. It is of no

particular consequence as a trading or manufacturing village, but is the most sacred spot in the Vellore taluk. The temple of Margasahâya Íswara, 'the guardian of travellers,' is an extensive building around which the houses of the village are grouped. Traditions current in other parts of the district would lead one to expect that one of the four guardian saktis posted by Bramha north, south, east, and west of Conjeeveram, would be worshipped here, but no such story is current, though it is perhaps not impossible that the shrine was originally dedicated to one of the furies, and afterwards consecrated to Siva, who is now worshipped in the form of a lingam. There appears reason to believe that Virinjipuram was once largely occupied by Linga Baliga merchants, who perhaps introduced the change of worship. The name Virinchi, signifying Bramha, is in accordance with the tradition of Náráyanavanam and Dévikápuram, the other towns of North Arcot in which saktis are worshipped. The present story regarding Virinjipuram is that the lingam was a very ancient one, and specially revered by travellers who journeyed through the wild country of the neighbourhood, in which many robbers and wild beasts lurked. A Canarese pepper merchant named Dhanapálu Chetty once travelled with his goods to Conjeeveram, and vowed that, should he reach his journey's end in safety, he would bestow the value of ten bags of pepper upon the temple. On his way he was robbed, but an armed horseman suddenly appeared and restored his property. At Conjeeveram he formed the intention of cheating the idol, and in consequence his pepper became cholum. He repented, and it was transformed again into pepper, out of the sale-proceeds of which he built the outermost surrounding wall of the temple. The wall looks quite modern, and is probably not more than two hundred years old. The other portions of the building have evidently been built at various times. The centre shrine is said to have been constructed by one of the Chóla rájahs. The Mahamantappam and the interior wall are attributed to a king called Ballikumbaráyer, and the next wall, with the western gópuram and the hundred-pillared hall, to another king Viragumbaráyer. The most beautiful carvings are however alleged to have been made at the expense of Bommi Reddi of Vellore and his sons, who constructed three very fine mantappams, known as the Bommi Naidu mantappam near the entrance on the east, the Akkapa Naidu mantappam on the south, and the Lingappa Naidu mantappam on the north. It is asserted that the architect was the son of the man who built the Vellore temple; if so, he was not so skilful a workman as his father, though his designs and execution possess considerable merit. They are evidently in imitation of those in Vellore, but are not nearly so elaborate. Upon the base of one mantappam is represented a very favourite story told in connection with the temple. A Brahman widow prayed to the swámi very stedfastly for a son and obtained her desire. Her neighbours unjustly concluded that she was no better than she should be, and therefore refused to have the boy's thread marriage performed, or to

allow him to succeed to his father's half share in the gurukal or temple priest's mániam. When he had reached the proper age for being initiated, he happened to be bathing at the Bramha tírtam, into which he sank. His mother was mad with grief, until the boy rose out of the water, wearing new cloths and the sacred thread, and informed the people that he had been taken below by a stranger, who had performed the thread marriage for him, and taught him the mantrams he was now able to repeat. The boy was now allowed to enter upon his priestly duties, but he could not reach to pour his vessel of water upon the lingam, which therefore bent towards him, and has ever since maintained its present leaning position.

After the time of Bommi Reddi the eastern gópuram was built by Achutta Ráyalu, the son of Krishnadéva Maharáyalu of Vijianagar, and many improvements were effected by subsequent rulers. There are numerous myths attached to the place which it would be tedious to narrate. It has little trade, but a good deal of cloth is woven by Kykalars. It contains ample accommodation for travellers and pilgrims in the choultries, which are more numerous in Virinjipuram than in any other town of the same size in the district except Tirutani. There are no less than five annual feasts celebrated here, the chief being the Bramha-utsavam, held in April, when large numbers attend, and all the choultries are full.

Until a few years ago saltpetre was manufactured in the neighbourhood.

Virinjipuram was a military outpost of the Mysore troops during the siege of Vellore, and the temple appears once to have been besieged, as marks of cannon ball appear upon its outer walls. Some of the carvings inside are defaced, probably by the Mahommedan soldiery.

Kylásaghur is a high hill 2,743 feet above the sea, situated six miles south of Vellore. It has a small hill fort built upon the summit, some say by the Mahrattas. At the base of the hill there once stood a large town called Kylásapatnam, often a royal residence in the time of the Chóla kings, but now effaced. Within the walls of the hill fort a small bungalow was built some twenty years ago by a former Sub-Collector. The temperature is charmingly cool, and there is an ample supply of pure water but no plateau. A rough bridle-path leads to the bungalow from the road between Vellore and Ussúr.

ARCOT TALUK.

The Arcot Taluk is bounded on the north by Wálájá, from which it is separated by the Pálár; on the east by the Chingleput District; on the south by Wandiwash and the Arni Jaghire; and on the west by

Vellore. Its length from east to west is about 35 miles, and its breadth about 12 miles; its total area being 432 square miles. The population in 1871 was 157,391, of whom 147,052 were Hindus, 9,022 Mahomedans, 1,112 Jains, and 205 Christians.

Almost the whole of the taluk consists of a flat and undiversified plain; but on the west the Vellore hills run into it for three or four miles, and in its extreme eastern parts, near the great Mámandúr tank, a few insignificant hills are found. All these elevations are bare and rocky without any jungle growth.

There are 354 villages in Arcot, of which seven are held as inám. The land revenue for a series of years is given below :—

Fasli.	Rs.	
1281	3,12,087	
1282	2,98,720	
1283	2,48,767	Average,
1284	3,49,956	Rupees 2,90,386.
1285	2,94,691	
1286	2,38,097	

The areas of cultivable, cultivated, and irreclaimable waste lands are—

	Government.		Inám.	
	Extent.	Assessment.	Extent.	Assessment.
	Acres.	Rs.	Acres.	Rs.
Cultivable wet	42,981	2,56,496	..	..
Do. dry	93,737	1,43,449	..	..
Cultivated wet	27,143	1,69,961	5,794	43,235
Do. dry	42,223	68,807	9,371	16,923
Irreclaimable	125,000	..	..	..

and the sources of irrigation—

	Government.		Inám.	
	No.	Irrigable area.	No.	Irrigable area.
		Acres.		Acres.
Tanks	488	30,628	..	5,974
Spring channels	172	12,353	..	..
Wells	7,952	..	..	..

The Pálár anicut feeds the tanks of eighty villages yielding a revenue of Rupees 65,757 from 11,032 acres of wet land, but that across the Chéyár does not benefit this taluk at all. The channels from the Pálár anicut are badly constructed, and need improvements similar to those carried out in the Wálájá Taluk. There are 62 kondams or dams built across small streams. The largest tank is that of Mámandúr, which irrigates the lands of 19 villages and brings in a revenue of upwards of Rupees 21,000. Though the waterspread is not so extensive as that of the Kávéripák tank, the depth of water is much greater, and the supply

lasts for fifteen months, while Kávéripák is exhausted in nine. The bund rests upon the bases of two hills, and islets rise here and there in the centre of the reservoir, making it the prettiest tank in the district. The largest rivers are the Pálár and Chéyár, which however only skirt the taluk. A few small streams rise in the Vellore hills, and eventually fall into the Chéyár.

The soil of the taluk is poor, being red and black clay mixed with a large proportion of sand or gravel, and as there are no local jungles, the land does not get much manure. The wet assessments run from 15 rupees for double crop to Rupees 2. The dry assessments vary from Rupees 6 to Annas 6.

The taluk has few wild beasts except in its western and hilly part, where cheetahs and wolves occasionally lurk. Fish are caught in large quantities in the Mámandúr and Kalavai tanks, Rupees 2,500 being the annual fish-rents for those reservoirs.

Beyond limestone there are hardly any minerals, even building stone being scarce compared with the rest of the district.

Agriculture, weaving, and tanning are the only important industries. The last is in the hands of Labbays, who chiefly reside in a large village named Visháram, west of Arcot. A great quantity of tanned hides are thence exported to Madras by rail. The weavers are collected in about forty villages, in which they have some 1,700 looms. The chief weaving villages are Tiruvettúr, Hasanamapet, and Venkatrájampet, each of which has about 200 looms, producing the ordinary country cloths.

Owing to the absence of good road-making materials the taluk is rather poorly off for means of communication, but being level, the old cart tracks serve very well. The lengths of road within its limits are—

1. Arcot to Tiruvettúr	25	miles.	Avenued.
2. Branch from the above to Kalavai	3	,,	Newly avenued.
3. Do. to Chakramalúr ..	3	,,	Do.
4. Arcot to Arapákam	8	,,	Do.
5. Do. to Dámarapákam ..	12	,,	Do.
6. Madras to Vellore	3	,,	Not avenued.
7. Abdullápuram to Perapambatt .	17	,,	Do.
Total ..	71	miles.	

Besides the above the following roads were constructed during the recent famine, viz. :—

Tiruvettúr to Mángál	11 miles.
Kalavai to Válépandal	8 ,,
Arcot to Varagúr	12 ,,
Chakramallúr to Perambákam	12 ,,
Móranam to Abdullápuram	14 ,,

These are unbridged and in bad repair.

Arcot.—In order to distinguish it from Ránipet, which was generally called Arcot, this town used formerly to be known as Old Arcot. It is situated about half a mile to the south of the river, Ránipet being as far from it on the opposite bank.

The name has already been stated to be derived from two Tamil words, *áru* and *kádu*, which signify the six forests. When Adóndai took possession of Tóndimandalam, he learned from the puránams that the country was sacred, having been the scene of the penances of various holy rishis who settled in the neighbourhood after Bramha performed his celebrated yágam at Conjeeveram. He therefore raised temples at Conjeeveram and other places, and introduced cultivation. In the course of time, however, the temples became deserted and the country relapsed into jungle, until the time of Bommi Reddi of Vellore, whose brother, Timmi Reddi, is locally believed to have built the Arcot fort.

Nothing is heard of Arcot in authentic history until the beginning of the eighteenth century, when it was chosen as the seat of the government of the Carnatic instead of Gingee, which was unhealthy. Daud Khán either built or improved the fort, and laid out the town in eighteen streets, named after distinguished commanders, whose names are still attached to them.

The nabobs continued to reside in Arcot until the time of Mahommed Ali, who removed to Madras, and was followed by the wealthy Mahommedan families that attended his court. Its trade however continued large for some years, and much gold lace and chintz were here manufactured and sold, until its young rival, Wálájápet, on the other side of the river, and only three miles distant, began slowly to draw away its commerce. For many years it has been a second-rate town, but its importance at one time may be judged of by the fact that it had no less than 360 makáns, or charitable institutions where fakirs were fed at the expense of the nabob and his nobles. The city was surrounded by a high rampart nearly five miles in circumference, 24 feet broad at the base, and 12 feet at the top, and faced with a thick masonry wall. This was called the Shahárpána or 'defender of the city,' and had five gates, the chief of which was the Delhi gate, which led out upon the bed of the Pálár. The northern wall followed the course of that river, and in parts had a wet ditch, with strong bastions at intervals embrasured for guns. The whole is now in complete ruin, having evidently at some time been blown up, for enormous masses of masonry lie in confusion about its foundations. In 1811 a flood in the river undermined some portion of the wall and still further completed its ruin; but the Delhi gateway still stands, and is an interesting relic, surmounted by a small chamber from which a pretty view of the river and opposite bank may be obtained. A tradition of doubtful authenticity asserts that this was a favourite resort of Clive. Within the city walls, and about half a mile from the river, are the ruins of the citadel so gallantly defended by Clive in 1751. It was a rectangular fortress of

considerable size, surrounded by a shallow ditch probably fed from the Pálár. Like the Shahárpána, its walls have been utterly destroyed, and its enclosure, as well as the ditch, given for cultivation. A poor musjid is the only building which now remains within the fort, besides two water reservoirs, fed by pipes from the river, in the centre of each of which are the remains of a fountain. Outside the fort, but within a couple of hundred yards from it, are the ruins of the nabob's palace, built upon the verge of a large tank. The buildings were dilapidated in 1811, when the Collector proposed to pull them down as they were dangerous to the public safety. Now a couple of walls and the vaults which formed the basement alone remain of the main portion of the edifice. The old durbar room was until lately used as the taluk cutcherry; its proportions are mean in the extreme, indeed, as far as can be now judged, the palace could neither have been extensive nor magnificent.

Between the palace and the fort stands the tomb of Nabob Sadatulla Khán, a domed structure, about 50 feet in height, and built, without much ornament, of green stone, each block being beautifully cut and fitted into its place. A monthly allowance is made by Government for the decoration of the tomb and the performance of religious ceremonies. Close to it is the principal mosque, the Jumma Musjid, of considerable dimensions, but without anything particularly attractive about it. It was built by Zulfikar Khán, and added to by both Sadatulla Khán and Anwar-ud-deen. On one side is a plain platform of brick and chunam, marking the spot where the body of the latter nabob rested after it was brought in from Ambúr, and before it was sent to Hyderabad. In the centre of the town is an unfinished mausoleum of green stone, where the remains of Nazir Jung reposed until they also were taken to Hyderabad. The people of Arcot explain the cause of their removal by saying that the spirit of Tippu Auliah, a very holy fakir whose tomb is just on the other side of the street, insisted upon it. He appeared to the nabob's relatives in a dream and remonstrated with them for burying Nazir Jung so close to him, and in a tomb so much more splendid than his. The dream was disregarded, and the structure continued to its present height, but every stone subsequently placed in position mysteriously fell down during the night. The builders were thus forced to desist, and the nabob was eventually buried in the northern capital.

Tippu Auliah's tomb is regarded with particular veneration by Mahommedans. Hyder is believed to have selected this fakir as his patron saint, and to have named his son Tippu after him. The building is of brick and stucco, with an inscription giving the date 1142 Hijiri, and stating that Sadatulla Khán raised it. There are many other notable tombs, each receiving an allowance from Government, where weekly ceremonies take place, and Mahommedan beggars are fed upon anniversaries.

Besides the Jumma Musjid there are twenty-two other places of Mahommedan worship in the town, all largely attended. At the last census the total population of Arcot was found to be 11,000, of which no less than 2,250 were Mahommedans. The town is the head-quarters of the taluk.

The temples built by the Chóla king in the six forests still exist with the exception of two. One is close to the Pálár anicut, in the village of Púnkádu, "the flowery jungle," and is dedicated to Baraduvájéswara in honour of the rishi of that name who here did his penance. The next is at Vépúr, "the village of the neem trees" and called after Vashishta. Valmiki rishi's temple is at Visháram, between Arcot and Vellore, where three streams unite. The name of the village is said to mean remarkable river (vishésha áru), because here the bones of the dead used once to turn into flowers, as at Kalavagunta in Chittoor. The shrines of Gautama rishi and Visvamitra rishi were situated by the northern bank of the Pálár, where the Nowlakh Tope now stands, in the limits of the village of Káré, so called after the tree of the same name which was found there. The Mahommedans utterly destroyed the former, and left but little of the latter, when the tope was laid out. The last of the forest temples is that of Agastaya at Vannivéd, 'the village of the vanni forest,' near Wálájá-pet, but a seventh was constructed by the Chóla king in honour of Átharayya maharishi in the bed of the Pálár near Gúdumallúr. Though the handsome green stones with which it was built were carried off to Arcot and used in raising Sadatulla Khán's tomb, the villagers have repaired the shrine with ordinary granite.

Tiruvettúr.—This is a village of some size, close to the northern bank of the Chéyár river. It was once the head-quarters of the old Tiruvettúr Taluk, and had a District Munsif's Court as well, which gave it an importance which it no longer possesses. The population has gradually dwindled down to about 1,300, and its trade is inconsiderable. Agriculture and weaving are the chief industries, the number of looms at work being about two hundred. Tiruvettúr appears formerly to have been one of the principal towns of the Jains, and its temple probably belonged originally to those religionists, who were subjected to dreadful persecutions referred to in the local puránam. It states that when the rakshasa Somakásuran stole the Védas, the rishis could not, from want of them, perform their ceremonies. Then Siva appeared in the form of an aged man and taught them the holy writings, at which they were greatly rejoiced, and building a temple, worshipped Siva under the title of Védapuri-Iswara. The Jains however questioned the authenticity of the new Védas, and one of their powerful kings, living at Púnávathi,[1] once

[1] The foundations of the old Jain temple still appear in this village, but the walls were pulled down to raise those of the Tiruvettúr temple. Two large Jain idols lie prostrate on the ground, and not far from them is a pool, in which the brazen doors and treasure of the Jain temple are supposed to be buried.

a large town but now a deserted village on the opposite side of the river, by a yágam produced a gigantic serpent which he sent to devour one Gnánasammandhamúrti, the most successful of the supporters of the new scriptures. Siva appeared as a snake-charmer, subdued the reptile by the strains of his pipe, and sent him against the Jains, whom he began to destroy. At last they submitted, and the king with many of his people became Sivaites. Some of the Jains still denied the truth of the Siva religion, and it was agreed that the rival Védas should be subjected to an ordeal by being dropped into the flood of the Chéyár. The result was that the Jain book floated down the river as far as Anapattúr, while the Brahman Védas moved against the stream for a distance of two miles to Cheyátheivenrán, "the conqueror of the Chéyár." The Jains had to submit to the penalty agreed upon: some were hanged, some cut to pieces, and many crushed in oil-mills. These modes of execution are represented by sculptures upon the walls of the temple. A remarkable piece of sculpture exists within the temple in the shape of a palmyra tree bearing male blossoms on one side and female blossoms on the other. It is about eight feet high, cut out of a single stone, and placed under a small mantappam. It is believed to be the work of Siva, as a representation of himself and Parvati united in one body. On this account he is here called Ardha-naréswara, and the fact that the god forms the right portion of the sculpture is said to account for the right hand being usually more powerful than the left. The name Tiruvettúr is, of course, composed of the words tiru, véda, and úr, and means the village of the sacred Védas, having reference to the legend composed by the Brahmans for the temple.

Timiri is a village containing about 500 inhabitants, situated about seven miles south of Arcot, on the Arni road. It is chiefly interesting from its historical associations, having a small fort alleged to have been built by Timmakkál, sister of that Bommi Reddi who constructed the Vellore fort. After the Mahommedans got possession of the place, it was given, with a jaghire worth a lakh of rupees, by the Emperor Mahommed Shah to one Fazl ulla Khán, the son of one of his ministers, as a reward for the faithful services of the latter. It was held on condition of garrisoning and provisioning the fort, and was continued on those terms to Mir Mahommed Khan, son of the first jaghiredar. During the time of Mahommed Ali it was resumed and never again restored.

The fort was partly destroyed during the Carnatic wars, and when the Pálár anicut was built the remaining stones were carried away and used in that work.

Pancha Pándava Malai is the name of a small rocky hill and an insignificant village about four miles south-west of Arcot. The village is wholly without interest, and the hill only remarkable for the ancient sculptures which it contains, and which, being ascribed as usual to the Pándavas, has given the hill its present name.

The principal sculpture is a large cutting into the eastern face of the

hill, where the granite rock slopes down very precipitously. This is called the "Yélu vásapadi," or seven thresholds, as six rough pillars about two feet square stand at the entrance and form seven doorways. An inner line of similar pillars supports the roof and corresponds with the outer line. The chamber is altogether about fifty feet broad, nine feet high, and sixteen feet deep: opposite to each of the entrances are recesses in the wall which may at some time have contained figures. The cutting is very rough, and the chamber entirely without ornament or inscription. A short distance above it, upon the face of the rock, is cut a figure, some two feet square, which seems to represent Buddha or one of the Jain 'tírtankaras.'

Other sculptures are found on the southern side of the hill, and about a third of the distance up it. Here an enormous flat rock has fallen upon some smaller ones, forming an extensive cave about three feet high. In a crevice of the rock is a pool of water, and near it are two apparently very ancient inscriptions which no one can decipher, and some figures cut in relief. One group of five is said to represent the five Pándavas, who, when wandering in the forests, are supposed to have lived sometimes in the rock mantappam on the east of the hill, and sometimes in this cave. Here again is a figure of a Jain or Buddhist idol more skilfully carved than that first referred to. There can be little doubt that the mantappam at least is of Jain origin, used perhaps, as well as the cave, by Jain recluses. The place has now been taken possession of by the Mussulmans, who have several tombs in and around the cave, besides a small musjid. The principal tomb is that of Syed Mír Yássam, a saint whose wife and children are also buried close by.

Mámandúr is a purely agricultural village irrigated by the large tank already referred to. It is chiefly remarkable for rock cuttings similar to those in the Pancha Pándava Malai, and here also attributed to the Pándavas. The bund of the tank rests upon two low hills, and in the most southerly of these the excavations are found all upon the eastern face. Two of the four are close together and are small, having but two pillars each, but they are not so roughly cut as those near Arcot, and both have long inscriptions which have been much defaced owing to the flaking off of the surface of the rock. In one of them are six large figures, apparently representing heroes, cut between the recesses at the back of the chamber.

The third cutting is the furthest to the south, and by far the largest of all, but it was never finished and has therefore no inscriptions. There is a double row of some six or seven pillars with the usual recesses behind them, but these are here peculiar in that each has two hollows cut in the rock below, and two corresponding ones above in which doors must originally have worked. The chamber is close to where the southern face of the rock begins, and from the south a commencement has been made of cutting entrances from that side. These excavations were probably also the work of the Jains, and possibly a party of monks

from Conjeeveram, only seven miles distant, may here have hollowed out for themselves a retreat with narrow cells into which each might retire and indulge in uninterrupted meditation. The last cave is of small dimensions and without ornament or inscription.

Below the tank bund are a few remarkable specimens of kistvaens, constructed of flat boulders which have evidently not been quarried. The covering stone of the largest is about 12 feet square and 2 feet thick in the middle, supported upon eight or nine rough boulders buried perpendicularly in the ground. A space has been left as an entrance upon the eastern side by omitting one of the supporting stones.

On the verge of the tank, and within the limits of Dúsi village, is a big rock completely covered with an inscription in Tamil and Grandham characters. It records a grant of land by Sri Ranga Víra Maharájah Rághavíra Rájah in S.S. 1505. Buried in the soil of the bund are three stones, also bearing inscriptions, probably stating the date of the construction of the tank and its author. The latter is said to have been Venkatadri Naidu, Poligar of Kálahastri, who named the tank Chennasamudram (a name it still bears) after his father Chennappa Naidu. When granting the English a settlement at Madras, he similarly stipulated that that town should be called Chennapatanam.

Mélvisharam is a large Labbay village between Arcot and Vellore. Close to the side of the road, and within a few hundred yards of the village on the Vellore side, are three curious tumuli. They show very clearly a double circle of large boulders, and the circumference of the largest is 140 yards, its height being nearly 20 feet. Excavations show that the soil is composed of clay and mortar mixed.

WANDIWASH TALUK.

The Wandiwash Taluk lies in the south-east corner of the district, and is bounded on the north by Arcot; on the east by Chingleput; on the south by South Arcot; and on the west by Arni and a portion of Pólúr. It has an area of 466 square miles, and a population of 153,507, comprising 145,251 Hindus, 2,856 Mahomedans, 1,089 Christians, and 4,311 Jains. The last mentioned are more numerous in this taluk than in any other.

The physical appearance of Wandiwash is that of a level plain with a very few rocky hills rising out of it, the two principal being Thavalagiri close to the kusba town, and Nedunkunam about 17 miles to the west of it.

The principal river is the Chéyár, which enters the taluk on the west, and, cutting off a small corner, forms the boundary between it and

BENGAL SECRETARIAT

Arcot. An anicut was built across it in 1856, which supplies 104 tanks with water. The only other stream of importance is the Sukanadi or Wandiwash river, which rises a short distance to the west of the kusba, and flowing eastwards unites with the Pálár in the Chingleput District. It supplies water to three large villages.

Wandiwash contains 424 villages, including four shrotriems. The classification and assessment of the land are exhibited below :—

——	Government.		Inám.	
	ACRES.	RS.	ACRES.	RS.
Cultivable wet	38,990	2,30,832	..	..
Do. dry ..	117,705	1,65,059	..	..
Cultivated wet	31,761	1,99,310	4,457	39,320
Do. dry ..	58,273	89,254	7,507	16,850
Uncultivable	130,000	..	..	..

The sources of irrigation are the following :—

——	Government.		Inám.	
	No.	Average.	No.	Average.
		ACRES.		ACRES.
Tanks	557	20,394	4	3,282
Spring channels ..	16	800	..	..
Anicut	1	12,015	..	..
Kondams	6	..	..	..
Wells	6,452	..	..	..

The chief tanks are those of Maradádu, Anakaúr, Purisay, Vákadei, and Sisamangalam, the three first being of one year's capacity.

The soil is usually poor, having much sand and gravel mixed with red and black clays, and being in parts much impregnated with soda, which effloresces during the dry season and renders the ground sterile. Being almost devoid of hills there is hardly any jungle, and manure is in consequence little used. A large proportion of the landholders are Brahmans and Jains, both of whom are very litigious and quarrelsome. The Brahmans are mostly Iyyengars, too proud to touch a plough and indifferently served by their Pariah labourers. To the east of the taluk several Telugu cultivators are found, whose industry and prosperity contrast remarkably with the carelessness and comparative poverty of their Tamil neighbours. The assessments range for wet land (double-crop) from Rupees 14 to Rupee 1-1-0, and for dry from Rupees 7-1-0 to Annas 10. These maxima and minima differ from those ordinarily in force in the district, since 131 villages of the taluk formed part of the Chétpat Taluk of South Arcot until 1860, when they were handed over to North Arcot with their existing assessments unaltered. The revenue for a series of years has been as follows :—

Fasli.	Wet.	Dry.	Total.
	RS.	RS.	RS.
1281	2,14,919	1,17,124	3,31,283
1282	2,10,440	1,09,899	3,20,339
1283	2,02,016	99,551	3,01,567
1284	2,12,148	1,10,447	3,22,595
1285	2,04,491	1,07,206	3,11,697
1286	1,53,659	1,08,148	2,61,807
Average ..	1,99,738	1,08,729	3,08,380

Besides agriculture the only industries are the weaving of cotton cloths and koré mats. There are altogether about a thousand looms for cloth in the taluk, chiefly in the village of Ammayapet; and in Wandiwash the Labbays have several hundred looms for the manufacture of mats. The rush "koré" is cultivated upon irrigated land, but the local supply is insufficient for the workmen, who import it to a large extent from Tindivanam, in South Arcot, and from Pondicherry. The rush is split, dried, and dyed in red, yellow, black, and other colours, and is worked into pleasing patterns.

Like the other southern taluks, Wandiwash is poorly supplied with roads, viz. :—

1. Arni to Tindivanam ..	36 miles.	Partly avenued.
2. Tiruvettúr to Wandiwash.	12 ,,	Avenued.
3. Wandiwash to Chétpat ..	18 ,,	Do.
Total ..	66 miles.	

Wandiwash is the largest place in the taluk, and has a population of about 4,500. The name, more correctly Vanthuváshi, is thus accounted for. A Pándian king named Jéyya Kandan suffered for many years from a painful internal malady, to cure which he visited various temples, but without avail. He was at length directed by a dream to an anthill, in which by digging he discovered a sacred lingam over which he built a temple. He was by this means rendered whole, and called the place Vanthuváshi, "I came and was cured." The lingam still bears the mark of a blow from a crowbar which is said to have struck it when it was discovered.

The town is chiefly interesting from its historical associations. It was one of the chief military posts of the Mahommedan government of the Carnatic, and many Mussulmans still live in it. The fort was probably built by the Mahrattas. It lies to the north of the town or pettah, which was itself fortified by a high wall, traces of which still remain. It is built in the ordinary Hindu style, being rectangular, with a circumference of about a mile. The walls are built of large granite blocks, some 18 feet high, topped with a line of masonry in which embrasures for cannon are cut. A moat surrounds it, except at

the south-east corner, where a strong circular battery stands, mounting eleven guns, and containing within it extensive powder magazines. There are a dozen small circular bastions, at intervals, raised above the ordinary level of the walls, with a square bastion in the south and another in the east. The fortifications have been much defaced, and only a part of the ditch now contains any water. Traces of its many sieges remain in the shape of cracked and starred stones, and many portions of the wall have evidently been breached by cannon and roughly restored by the garrison.

The jaghire was first given by the Emperor Mahommed Shah to Mahommed Takia Khán, at the request of his father-in-law Dóst Ali, the nabob. He was deposed by Wálájáh because he and Chanda Sahib had married sisters, and he had admitted French officers into the fort. After some years Wálájáh conferred it upon his daughter Dariah Bégam, who held it for some years. At the cession the nabob was in possession of the revenues, which therefore passed to the Company.

The town lies a short distance to the north of the Sukkanadi, and is poorly built. It has a fair trade in grain, and besides mats a little leather is manufactured.

In the temple of Jellakantéswaraswámi, Rámasami is also worshipped, the idol being placed in the Kalliána mantappam. It was formerly placed in a separate Vishnu temple close to the gate of the fort, but the Mahommedans destroyed the shrine, and only consented to give up the idol upon receiving all its jewels.

Beyond the fort to the north rises the Wandiwash hill, called Thavalagiri, or the white mountain, composed of gray granite and having an elevation of about 500 feet above the plain. It possesses two peaks, upon the higher of which is built a small shrine of some repute in honour of Thavalagiri Náthar. At the foot is a smaller temple, built, as an inscription upon a stone states, in S.S. 1600 in memory of Rathnabhai, the mother of the Rájah of Kánój, who died here on her way to Rámeswaram.

Désúr is the second place in importance in the taluk, and has a population of 2,700. It is a flourishing village, with a good number of looms at work, and some tanneries. It was formerly the chief residence of a jaghiredar, whose fort is now in ruins. The jaghire was at first attached to that of Gingee, and conferred upon one Savanath Singh, after the reduction of Gingee, and was subsequently held by Badranath Singh, Chatter Singh, and Manrup Singh without paying peshcush. The son of the last named, Laxmanath Singh, was after the death of Názir Jung forced to pay tribute to the French and subsequently to the nabob, but in reward for his services against Mahommed Isuf of Madura, who committed hostilities in the neighbourhood of Tiruvannámalai, tribute was remitted. Wálájáh resumed the estate, but eventually a portion, Désúr and Mélachéry, were alone restored. These were resumed by the Company. A weekly market is held here, to which

about a thousand people resort, and where cloth is one of the chief articles offered for sale.

Thellár is a large village having a population of 1,800; it is situated on the road to Tindivanam in South Arcot. It has the ruins of a small mud fort, built, it is said, by the notorious Nandan Rájah of Padavéd, who is described as having frequently resided in it. Within the walls is a Siva temple. The Jains have, as at Désúr, a place of worship in Thellár.

Síyamangalam is a village with a population of some 300, and once formed part of the Désúr Jaghire. It is reputed to have once been a very large place, built by one Chembu Rájah, of whose history nothing definite can be learned. It is now chiefly remarkable for its rock cut temple. The inner shrine, the lingam, representing Stambéswaraswámi, the four dwárapálakas, or guardians of the entrance, and a gallery supported by pillars, called the ádirálla mantappam, are all carved out of one solid rock. In front of this stands the enclosing wall, in which images of minor deities are represented. These walls are in a state of ruin, the stones having been carried away to build the Désúr fort, which is not far off.

Anakaúr lies near the Chéyár river, upon its southern bank and not far from Tiruvettúr of the Arcot Taluk, and has now a population of 1,800. Its name signifies the village of foot-soldiers, because, so runs the local myth, Ráma, while returning from Ceylon with his monkey allies, encamped here with his army and went across the river to pay his devotions to Védapuríswara of Tiruvettúr. Hanumán remained at Anakaúr, where the idol now worshipped is called after him Hanumánthéswara. The names of several other villages in the taluk have reference to Ráma's triumphant return from Ceylon. At Anapathúr he is believed to have worshipped Siva, and hence the village was called that 'of the great warrior.' At Purisay he directed Sugriva, Hanumán's superior, to found a town, which he did, and called it the village of Siva (Puríswara).

Another legend to which the names of several villages refer is that of the destruction of Vallubhi, the sister of Dwárakásúra the rakshasa, by Subramaniaswámi with the assistance of Vignéswara. Vallubhi is reputed to have lived at Vallam (a contraction for Valmikam, an ant's nest, since Siva here manifested himself in that form), and to have had the power of bringing forth giants, heroes, elephants, horses, &c. Tormented by these, the minor gods assembled at Úrukúdi (the gathering of the villages) and besought Subramaniaswámi to save them. With great respect he applied to Vignéswara at Vanakambadi (the village of respect), who consented to destroy Vallubhi, and accordingly received offerings of cooked rice at Sórupákam (the village of boiled rice). At Aneibhogi (subdued by the elephant, *i.e.*, by Vignéswara, who bears an elephant's head) the malignant goddess was conquered, and the country delivered from her annoyance.

PÓLUR TALUK.

The taluk of Pólúr is somewhat triangular in shape, and situated in the south-west corner of the district. Its northern apex touches the Vellore Taluk; its north-eastern side borders on the Arni Jaghire and a portion of Wandiwash; its southern on the Tiruvannámalai Taluk of South Arcot; and its north-western on the Salem District. The length of each of its sides is about 30 miles, and its superficial area 443 square miles. The population is sparse, being but 109,150, of whom 104,625 are Hindus, 3,167 Mahommedans, 522 Christians, and 836 Jains.

The northern and western parts of the taluk are hilly, being occupied by the Jewádis. The chief eminences are known as the Carnatic ghur, and Padavéd drúg; but there are also isolated hills near Pólúr in the centre, and Chétpat in the extreme south-east corner. The rest of the taluk is tolerably flat, and here the climate is salubrious, while in the hilly portions fever is very prevalent.

The principal river is the Chéyár, also called the Bahudanadi or hand-giving river. It was originally called the Scandanadi very many years ago, because Scanda-swámi, or Subramaniam, when fighting against Thárákásuran, ordered his peacock to peck at a mountain, from whence the present river flowed and refreshed his army. After a time two brothers, Vasuda and Sumati (some say they were rishis, and that their names were Swarúpananda and Nithiananda), lived upon opposite sides of the river, and were both so deeply engaged in meditation that they only opened their eyes to eat what fruits they found handy once in twelve years. Upon one of these rare occasions the brother who lived on the southern side found the country desolated with famine, and therefore crossing the river, he plucked a fruit within his brother's domain without his knowledge. This amounted to theft, for which the offender would be punished in his future life if not chastised in the present. Application was therefore made by both brothers to the ruler of the country, who awarded as a punishment the loss of a hand. The other brother advised the mutilated man to worship at Pólúr and Padavéd, and after that to bathe in the Scandanadi. The remedy proved efficacious, the hand was restored, and the river became the Bahudanadi, which in Telugu appears in the form of Chéyár. The affluents of this river are the Kamandalanadi, or Padavéd river, the Murrukandanadi, the Bhímanadi, and the Manjalár, all having their rise in the Jewádi hills.

The taluk contains 232 villages, of which one is a shrotriem. The cultivable, cultivated, and irreclaimable waste lands are as follows :—

	Government.		Inám.	
	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.
Cultivable wet	32,253	1,52,953	..	..
Do. dry	79,730	91,712	..	..
Cultivated wet	23,376	1,19,241	33	155
Do. dry	58,168	67,454	29	48
Waste	175,000	..	..	..

The soils are black and red clays mixed with sand or gravel, and in the vicinity of the hills, where the ground is more fertile, a rich loam is found. On the whole, Pólúr is a fertile division and raises good crops of rice, kambu, rági, and varagu. The assessments vary in different parts, some villages having been in 1866 transferred from South Arcot. The original North Arcot villages have their highest wet assessment for a double crop fixed at Rupees 14 per káni and for a single crop at Rupees 9, the lowest wet rate being Rupees 2. The dry rates run from a maximum of Rupees 6 to a minimum of Annas 10. In the transferred villages the wet single assessment is from Rupees 11-14-0 to Rupees 1-8-0, and the dry from Rupees 7-1-0 to Rupee 1-1-0. The revenue for a series of years appears in the following statement :—

Years.	Wet.	Dry.	Total.
	RS.	RS.	RS.
Fasli 1281 ..	1,14,888	65,031	1,79,919
,, 1282 ..	1,15,469	67,272	1,82,741
,, 1283 ..	1,15,724	62,942	1,78,666
,, 1284 ..	1,17,553	65,407	1,82,960
,, 1285 ..	1,18,470	65,015	1,83,485
,, 1286 ..	1,18,492	66,939	1,85,431
Average ..	1,16,766	65,434	1,82,200

The sources of irrigation are—

Description.	No.	Irrigation area.	Revenue.
		ACRES.	RS.
Government tanks	316	21,183	1,14.103
Inám tanks	1	33	155
Government spring channels.	13	141	616
Do. river channels.	21	957	5,487
Wells	5,039	..	..
Dams	13	111	616

The number of spring and river channels in Pólúr is remarkably small. The chief of the tanks are those of the villages of Alliábad and Pólúr, the former believed to have been built by one of the Chóla rájahs. The tank is fed by a channel taking off from the Padavéd river, near a dam or kondam improved some ten years ago. Every year a festival takes place near the dam in commemoration of the mysterious way in which the tank supply channel was formed. The rájah, it appears, after constructing the tank found that it had no sufficient supply of water. In his troubled sleep a female appeared to him, and directed him to walk to Renukámbál's temple at Padavéd without once looking back. In the morning he fulfilled these instructions, and did not turn until he reached the Padavéd river. Then turning he saw a gigantic serpent following him, which struck its head against a rock near the river and glided into it. This rock is now called the "pambú adichellan pori" or serpent-struck boulder, and has some seams of trap in it resembling a serpent's trail. The rájah was delighted to find that the reptile's course was marked by a magnificent channel from the empty tank to the river. He built a kondam close to the rock, and directed that the annual festival in honour of the goddess should be held. Another large tank is that of Pólúr, which irrigates 1,100 acres, bearing an assessment of nearly Rupees 5,000.

The ordinary minerals of the district are found in Pólúr, and besides these, magnetic iron ore occurs in small nodules near Pottarei, 5 miles from the kusba town. At Kandápalieu, 14 miles from Pólúr, a few garnets are found in a piece of ground measuring three acres, but they are of little value, having evidently been subjected to great heat, which has caused many flaws.

The forest wealth of the taluk is considerable, but confined to the hilly tracts, the area of the forest being about 40 square miles. The timbers are similar to those of Vellore, but the forests being at a distance from the railway are not so valuable. The whole is under the management of the Forest Department.

Much jungle products, such as myrobalams, gums, lac, wax, honey, wild saffron, bhang, country sarsaparilla, &c. are collected by the Irula and Malayáli people. Cheetahs, bears, hyænas, sambar, deer, and wild pig are common; bison are not uncommon, and tigers and elephants very occasionally found. The shooting about Padavéd and Carnatic ghur is probably the best in the district.

The manufactures are only two, weaving and shoe-making. There are many weavers in the taluk, their chief centres being the villages of Mansurabad and Mámbatt, where a rather superior sort of cloth is turned out and exported mostly to Bangalore. Coarse cloths are made at Alliábad or Kalambúr, Singaravádi, Palankovil, and Mahadévamangalam. Cumblies are woven at Atuvambádi and Kárapatt, the latter village producing the finer kind. Shoe-making is in the hands of the Labbays of Chétpat, who manufacture many thousands of shoes annually, which

are sold all over this district as well as South Arcot. This industry is, however, failing.

There are but four roads in the taluk, viz. :—

1. Vellore to Tiruvannámalai .	20 miles.	Poorly avenued.
2. Pólúr to Arni ..	11 ,,	Not avenued.
3. Do. to Chétpat ..	16 ,,	Do.
4. Do. to Nakshatrakóvil ..	8 ,,	Do.
Total length ..	55 miles.	

The last road is the only one which serves the western part of the taluk. The Chétpat road is continued to Wandiwash.

Pólúr, the head-quarters of the Tahsildar, is the most populous place in the taluk, containing 5,200 inhabitants. It is situated about two miles from the Chéyár, on its northern bank, and east of some hills called the Sampathgiri and Vassúr hills. Between these is built the bund of the Pólúr tank, which receives the waters of the Manjalár. The Sampathgiri is topped by a holy temple, and there is another shrine in the town. Pólúr is poorly built, with narrow and ill-arranged streets. The road to Tiruvannámalai passes through its main bazaar, in which there is a lively trade in grain. A small ruined fort, without any history, stands near the town, but beyond this it is without any features of interest.

Chétpat.—This is a declining town, now inhabited by only some 1,900 people, but it once formed the head-quarters of a taluk of the same name which belonged to South Arcot. The town is now chiefly celebrated for its manufacture of native shoes already referred to, though it was formerly a Mahommedan military station of no small importance. The fort is now in ruins. A large weekly fair is held here, attended by many villagers from this and the Wandiwash Taluks.

Padavéd.—This desolated city is one of the most interesting in the district. Though it now contains only 300 inhabitants, tradition says that it was the capital of a dynasty which many hundreds or thousands of years ago held sway in this part of the country. This no doubt refers to the Kurrumbas. The town was sixteen miles in circumference, and full of temples, choultries, and fine private residences. The extent of the city may be judged by the fact that the present villages of Santhavásal, where the fair or santha was held, and Pushpagiri, the site of the flower market, are four miles apart. The city is believed to have been entombed by a shower of dust and stones, which overwhelmed the whole of its magnificent buildings. Jungle has overgrown the whole area of the original city. There are two extensive but ruined forts upon the plain, built doubtless by the Kurrumbas, and another upon a peak of the Jewádi hills which overlooks the city.

There are two principal temples in Padavéd, one dedicated to a goddess called Rénukámbál and the other to Rámaswámi. The offerings at the latter were formerly paid to Government, the annual revenue being about

Rupees 300. Rénukámbál's shrine is the more celebrated, and is visited by large crowds on Fridays in the month of Ádi. The tradition regarding her and the city of Padavéd is as follows.

The goddess was the daughter of a king, named Raivata Rájah. Having obtained permission from her father to marry, she started with an army in search of a suitable husband. While she was in camp to the north of Padavéd hills, a voice from the skies announced that Jamadagni rishi, who resided in the forest by the river, was the man for her, and she accordingly marched onwards to find him, accompanied by her army and her attendant maid-servant Chámandi, who was skilled in magic. The rishi resented the goddess' intrusion, and conjured up magical armies, which Chámandi burned up by the fiery flames of her eye until Jamadagni quenched the flames by pouring forth the contents of his inexhaustible pot called Kamandalam. This formed the Padavéd or Kamandala river. For a long time a fierce battle continued, in which numbers were slain, and hence the town is called Padei (an army) vettu (to slay). At last Chámandi was seized and bound with a garland of flowers upon the banks of the river, where her temple, that of Chámandéswari, now stands.

It now occurred to Rénukámbál that she had come not to quarrel but to get married, and she therefore called off her army, and began to play most melodiously upon her tom-tom. The surprised rishi came forward to see who the skilful performer might be, and she, observing the success of her manœuvre, coolly retreated into the forest, where he followed and married her. This happened in the month of Ádi, and on the Fridays of that month therefore the chief feasts take place.

After a time a son, Parasuráman, was born to the couple, who proved himself a most extraordinary child. Rénukámbál was a model wife, and as her mind was always filled with chaste thoughts she was able daily to carry water from the "Padmasarasu" pool in a vessel made of sand. But one day a gandharva flew across the sky as she was drawing water, and his beautiful form reflected in the pool excited her admiration. From that moment she was unable to form her vessel from sand, and her husband's attention being attracted to the circumstance, he became jealous and ordered Parasuráman to behead his mother. The obedient young man fulfilled the order, and the rishi, greatly pleased, promised to grant him any request he chose to make. He begged that his mother's corpse might be restored to life, and was given some sacred water to sprinkle over the severed head and trunk. In his agitation Parasuráman united his mother's head to the body of a Pariah woman who had opposed him when he attacked his mother, and whom he had killed. To make matters worse he joined the Pariah's head to his mother's body. Jamadagni after some thought announced that as the head was the most important part of the body, the woman first brought to life represented Rénukámbál. The other was named Máriamma, and ordered to attend Rénukámbál as a servant. She has a temple at

Padavéd, where animal sacrifices are offered up, chiefly by Pariahs, who consider that she belongs to their caste.

After some years a king named Kárthavíra Arjunan came to visit the rishi, and was entertained at a magnificent feast provided by the cow Kámadénu, which could produce anything in the world. The rájah asked for the animal and was refused, on which he in a rage cut off Jamadagni's head. Rénukámbál attempted to commit sáti, but the dévatas extinguished the flames of the funeral pyre with showers of rain. She descended naked, and covered with blisters, but, making garlands of margosa leaves, clothed herself, and by a thought summoned her son to her presence. Parasuráman was greatly annoyed at what the dévatas had done, but they explained that they had acted merely to increase the goddess' consequence, for now she would be universally feared, as she would manifest herself in the shape of blisters which should break out upon the bodies of the people, and for which margosa leaves should be the only cure. Small-pox is therefore now supposed to prove that this goddess has taken possession of the sufferer, and margosa leaves are still the common remedy. The figure in the temple is buried up to the neck in the ground, since the body belongs to a Pariah, and is propitiated by offerings of rice, jaggery, and ghee. The female devotees often appear before it clothed only in garlands of margosa leaves.

When these things happened there were no city or temples at Padavéd. These, the legend says, were built by one Viraswán, a member of the Solar line of kings of Ayódia. A rakshasa named Rishaparava caused this prince much annoyance and trouble, and he applied to the rishi Vashista to be directed to a spot where he could live in peace. Vashista narrated the sacred history of Padavéd, and advised Viraswán to establish himself there. He did so, and was succeeded by his son Hárihará and his grandson Hemamáli, with their descendants, who reigned very gloriously.

The destruction of this great city was caused by the curse of Hanumán. When Rama fought with Rávanán the latter was protected by the goddess of Padavéd, to whom he had most devoutly prayed, and she therefore lodged his life in a lotus flower which grew upon the Padmasarasu. Hanumán tried to pluck the flower, but was opposed by the dévi, who cursed him. He retaliated by prophesying that her mighty city should be destroyed. She appealed to Ráma, who, on condition that Rávanán should be given up, modified Hanumán's curse by saying that the ruin of Padavéd should not take place until after ten thousand years of the Kaliyug had passed, when one Nandan Rájah should be the reigning monarch, who would prove a most cruel and sinful king, for whose misdeeds the town would be overthrown in a rain of dust. Then Ráma settled by the side of the dévi, and his present temple was built. There is also a pool of water called the Rámatírtam after him.

Many stories are current regarding the wicked king Nandan, after whom the place is generally called Nandan Padavéd. He was the son of Uttunga Rájah, and is described as most overbearing and tyrannical.

It is not unlikely that after the conquest of the Kurrumbas he was placed in Padavéd as ruler of the neighbourhood.

Nakshattrakóvil is situated near the village of Yellattúr, and possesses a temple only second in importance to that of Padavéd. It is dedicated to Subramaniaswámi, who is supposed to have the power of curing all kinds of sicknesses. Vows are therefore made to him, and penances performed, which usually consist in going round the hill several times. As at Tirutani, many pilgrims visit the shrine on the Krithiga day of each month.

Mandakollattúr was once celebrated for its pundits, who were well versed in Sanskrit and the Védas. The village has now the largest Brahman population in the taluk.

Carnaticghur is a strong hill fort said to have been built by the Mahrattas. It is situated upon a spur of the Jewádis, about 2,700 feet above the sea, which terminates in a huge dome-shaped rock, on which the citadel is built. This is separated from the rest of the fort by a narrow neck of rock fifty yards broad. The length of the main enclosure is nearly half a mile, and its breadth about a quarter of a mile. The ramparts are built of stone to a height of from 20 to 25 feet, surmounted by a stone parapet having embrasures and loop-holes for muskets: a banquette runs all round the walls. There are a few ruined buildings to be found here and there within the enclosure, but all is so overgrown with jungle as to be rapidly falling into complete ruin. The view from the highest point of the citadel over the hills on the one side and the plains upon the other is very charming.

Tirumalai is a small village about 7 miles north-east of Pólúr, and about five from Dévikápuram. It stands at the base of a precipitous hill of granite upon which are some relics of the Jain religion. Many Jain families live in the village, and the temples on and below the hill still belong to them. The most striking sculpture on the hill is a rude Jain figure, 16½ feet high, found cut on the face of a cliff near the summit. It is not surrounded with the usual spiral branches or leaves. Upon its left is a long inscription, in archaic characters, the meaning of which has not been yet discovered. Other inscriptions occur elsewhere, and particularly near the temple at the foot of the hill, but many are greatly defaced.

There appears nothing remarkable about this lower temple, but close to it some rock chambers have been constructed in a natural cave formed in the face of the cliff. Many Jain figures once stood in these, but were more or less destroyed during the Hyder Kalábana. Upon the walls are numerous frescoes, on the whole very well executed. The most interesting, and perhaps the best painted, is a circular one having a Jain figure seated in the centre, and the partitions around being filled with Nágas; Monks, white-hooded Nuns and others.

Close to the village are two very large stone circles.

KÁLAHASTRI ZEMINDARI.

The history of the Kálahastri family, which belongs to the Vellama caste, appears to be very obscure, the present Zemindar being able to cast little light upon it. He states that one Oraganti Prathappa Rudrulu, an ancient king of the country, granted the estate to Dámara Javi Ráyaniváru, the first Poligar. It may be safely presumed that they were originally Ménkávalgars, appointed by the Vijianagar kings about the fifteenth century. Like others of the same standing, they became after the fall of that kingdom a lawless set, constantly warring against their neighbours and appropriating fresh territory. In the middle of the seventeenth century the Kálahastri Poligars had possession of the country as far as Madras and Conjeeveram on the east and Wandiwash in the south, and from one of them, named Dámerla Venkatadri Naidu, Mr. Day in 1639 obtained the grant of Chennankuppam, a small fishing village north of Mylápúr, where, after obtaining a sunnud from the Rájah of Chandragiri, he built Fort Saint George. Part of the agreement with the poligar was that the new settlement should be called Chennapatanam, after his father Chennappa Naidu.

The earliest sunnud produced by the poligars at the cession was one granted by the Emperor Aurangzib, which showed that they then held their estate upon a military tenure, being immediately subordinate to the Arcot Nabob, and bound at his summons to appear in the field with 5,000 armed foot men. Their military power was always considerable, but not generally utilized in a desirable manner. To illustrate the lawless character of this and the neighbouring family of Kárvétnagar their history during the last ten years of the eighteenth century may here be given. In 1790, when the Company's troops were absent in Mysore, the Kálahastri Poligar's son took up arms against his father, being assisted by Kárvétnagar, and the poligar was forced for a time to resign his authority, until the commandant of Chandragiri marched up and suppressed the disturbance. A few years later the two poligars waged a small war against one another in support of claims to some debated frontier lands, and when Kárvétnagar was ordered to desist, he replied that were he to do so he would be disgraced in the eyes of his caste: nor did the contest cease till many lives were lost. In 1799 two brothers contested the right to possession of the Matla Zemindari in Cuddapah, and each invoked the assistance of these poligars, who accordingly took opposite sides, and both intrigued with the Fouzdar of Cuddapah for considerable sums of money. They took the field with some 6,000 men each, and Kálahastri was defeated, losing two guns. He however reinforced his little army, and, in spite of the remonstrances of Government, seized Matla and placed his ally in possession of the estate. In 1801 both poligars were forced to disband their armed retainers, and in the following year obtained permanent sunnuds entitling

them Zemindars and making considerable additions to their peshcush. That of Kálahastri now amounts to Rupees 1,76,790, but as the revenue from the estate probably exceeds five lakhs, the Zemindar has ample means. He was made a C.S.I. in January 1st, 1876, and just a year later was honoured with the title of rájah.

Only portion of the zemindari lies in North Arcot, the rest being situated in Nellore. The North Arcot portion lies at the extreme north-east corner of the district, being bounded on the west by the Chandragiri Taluk, and Kárvétnagar Zemindari; on the north and north-east by Nellore; on the south-east by Chingleput; and on the south by Kárvétnagar and the same district. Its outline is very irregular, and the Satiavéd Taluk of Chingleput divides it into two portions. The area is 736 square miles, having a population of 135,104, of whom 3,453 are Mahommedans, 63 Christians, and the rest Hindus. The Zemindar divides his estate into the taluks of Kálahastri and Kacchinádu, which are again sub-divided into several maganams; but for Government administrative purposes it is divided into two divisions, Kálahastri on the north-west, and Máderpák on the south-east, each in charge of a Deputy Tahsildar and Subordinate Magistrate. The Máderpák Division is difficult of access from the rest of the district, the most expeditious route to it being by canal from Madras, or across a long distance of the Chingleput District from the Tiruvallúr railway station. For this reason it was ordered in 1870 to be transferred to Chingleput, but the Zemindar objected to having parts of his estates in three districts. A transfer of both Kálahastri and Máderpák was then proposed, but abandoned owing to the great distance of Chingleput, the Judge's head-quarters, from Kálahastri.

The Eastern Ghauts enter the zemindari at its north-west extremity, and run along the border between it and Cuddapah. To the east of them the country is generally open as far as the sea, that is to say, the whole of the northern portion of the estate is comparatively flat, and is mostly covered by a stunted growth of scrub. The Nagari hills run northwards from Kárvétnagar along the eastern side of the Suvarnamukki river as far as the town of Kálahastri. On the east of this range, and almost parallel to it, are the Alikúr hills, divided by a gap, through which the Náráyanavanam river flows. They form a bold and lofty range, which lies partly in Máderpák and partly in Chingleput. The two chief peaks are Rámagiri in the south, close to the large village of Nágalápuram of the Chingleput District, and Kámbákamdrúg in the north, which a few years ago was decided to belong to Chingleput. The range which extends over a distance of about thirty miles terminates near the village of Káttúr in the Kálahastri Division. East of Nágalápuram begin the Ténémalais, a rather lower line of hills, which derive their name from the fact that they were once celebrated for their honey. They have a westerly course as far as Madanambéd, and then run northwards to Vánellúr. All these hills are well covered with vegetation, and have

several perénnial streams discharging down gorges, or kónas, where the finest forest grows. The principal gorges are the Modalli kóna, Mallavári kóna, Sálava kóna, and the Chaddikutti madugu. They are all regarded as sacred, but the last particularly so, having representations of the seven celebrated virgins carved upon a rock, where villagers assemble in October and offer jaggery and water to the figures. Upon the hill close by is a dismantled old hill fort, called Mádigadurgam, built, the people say, by a Mádiga (cobbler) chief who once ruled the surrounding country. There are several other forts in the zemindari, the principal being Ándaveramkóta, ten miles south of Kálahastri, in the Nagari range of hills. It is now deserted, but was once often inhabited by the Zemindar. It had two roads leading to it, one defended by three and the other by two barriers, and was at the cession reported to be strong, being surrounded by very difficult country. It was then well stored with grain and mounted a few cannon and thirty jinjal pieces. At Tirupuránthakapuram is a fortification of no strength, situated upon the plain, and another of the same character is found near Ígaváripáliem. There was another at Sitharámpúr, mounting two cannon and fifty jinjals, at the base of the Siva durgam, which was not fortified, though a few buildings stood upon its summit. All these fortresses were destroyed by the British, and only the ruins now remain. There are signs of fortifications at Brahmanapalle, Nirupákam, and Tondimanádu, the last village, near Kálahastri, being locally a somewhat celebrated place since the Emperor Tondiman is believed to have lived there.

The forests of Kálahastri are of considerable value, although not near the line of rail. They are usually leased out by the Zemindar, and a good deal of charcoal and firewood are exported from the Máderpák Division by the canal to Madras. Cheetahs, bears, and smaller game are fairly numerous, and a tiger is occasionally heard of. A large number of Irulas and Yánadies live among the hills, and gather honey, roots, and barks, which are sold in the plain villages.

The chief rivers are the Suvarnamukki, the Rállár, and the Arunánadi or Náráyanavanam river. The first flows past the town of Kálahastri and goes into the Nellore District. The second rises among the hills south of Kálahastri town, and after flowing for about 25 miles in a north-easterly direction, doubles back to the south-east and discharges into the Pulicat lake. It derives its name—"the rocky river"—from the rocky nature of its bed, a very unusual feature in the rivers of North Arcot. The Arunánadi drains the south, and contains, as do the other two, excellent springs. Its name is said to be derived from the word "aruni," which signifies a branch of the *Ficus religiosa*, used for producing fire. The legend states that when Bramha desired to perform a yágam at Bramhagiri, Saraswati entered one of these trees, and after producing fire from it, issued forth in the shape of the present river. The other small streams are the Válagala Montha, in which Válaga fish are caught, and the Kalingi in the Kálahastri Division, and

the Goddár, or barren river, which is a tributary of the Arunánadi, in Máderpák. The Suvarnamukki and the Rállár have dams of stone set in mud built across them. The number of villages in the zemindari is 612, of which 285 are alienated as inám; of the total number about half lie in each of the divisions of Kálahastri and Máderpák. Out of the area of the zemindari, which is approximately 540,000 acres, a half is said to be cultivated, and only 40,000 acres of cultivable land to be left waste, but much more than this extent of waste is doubtless cultivable. The soil is for the most part a red clay mixed with sand and gravel, and is not very rich except in the south of Máderpák. The sources of irrigation are chiefly tanks, but the number is not ascertained. They are, for a zemindari, in good order. The lands are regarded both by the proprietor and the tenant as the absolute property of the former, the ryots being merely tenants at will, without right of sale or transfer; but practically this idea has no effect in making the cultivators' position uncertain. It is however an undoubted fact that, except in the flourishing parts south of Máderpák, few wells exist other than temporary ones made of wickerwork. The rent varies greatly from village to village, but the general principle is that the Zemindar should receive one half of the produce. Many villages are leased out for fixed sums to a few of the chief cultivators, who make their own terms with the ryots. Fixed money payments only exist for the most unfavourably situated lands (konda bhúmulu or hilly lands), and as the rates for these are for wet from Rupees 9 to Rupees 1-8, and for dry from Rupees 2-14 to Annas 10 per acre, the height of the assessments for good land may be imagined.

Besides iron, lime, and building stone, Kálahastri has copper and a great deal of the soda soil used for making glass. Iron is not now worked at all, but used to be in the village of Sirasanamédu in the Kálahastri Division, where it occurs in nodules, and near Tallárivett, on the north-west of the Máderpák Division. The position of the old copper mines, which are no longer worked, seems now unknown, but they were probably on the northern border. In the Máderpák Division shell chunam is largely produced. The other industries are weaving and glass-making, the former being chiefly carried on in the Máderpák Division and the latter in that of Kálahastri, though it also takes place at Gázulapellúr and Kanchanaputtúr villages of Máderpák. The glass-making villages in the Kálahastri Division are Kásaram, Chintapalle, Alatúr, Káttúr, Kottapáliem, and Pillamédu. Vast numbers of bangles as well as lumps of glass are here made and sold for export to a distance. The most skilful weavers are the Jándras of the Máderpák Division. At Agarampet of Máderpák brass utensils are made, but the workmanship is poor.

Kálahastri is very badly supplied with roads. The only good ones are the following:—

Kálahastri Division.

1. Tirupati to Naidupett	22	miles.	Avenued.
2. Branch from the above to Venkatagiri (Nellore)	15	,,	Do.

Máderpák Division.

3. Puttúr to Surutipalle	8	,,	Not avenued.
4. Tiruvallúr to Satiavéd	4	,,	Do.
5. Branch from the above to Máderpák ..	2	,,	Do.
Total ..	51	miles.	

All the Máderpák roads, except the western one, are maintained by the Local Fund Board of the Chingleput District. Besides the above some roads were formed during the famine, but being unbridged and unrepaired, cannot be considered as very serviceable. The chief one unites the towns of Kálahastri and Máderpák, more than thirty miles apart, and passes over a wild and difficult country much cut up by jungle streams, so that it will be an expensive work to keep up, and it will probably not be completed for years. It is however much needed, as the whole of the centre of the zemindari is at present without any proper means of communication.

Kálahastri, or more correctly, Sri Kálahasti, is the largest town in the zemindari and the residence of the Zemindar. It has a population of 6,750, and is situated upon the right bank of the Suvarnamukki at the extremity of the Nagari hills. The approach to the town from the river is through the last gap in these hills, which close to Kálahastri are considered so holy that it is not permitted to quarry stone or gravel from them.

The centre of the old town is occupied by a square filled with houses, around which four broad streets run and meet one another at right angles. To the east and north-east the town has been irregularly extended, the streets and alleys being narrow, irregular, and not very clean.

The temple, from which the chief importance of the town is derived, stands at the base of the southern hill and near the south-west angle of the central square. It is said to have been created by Bramha, in the Krithayuga, when it was of insignificant dimensions, but it was extended and improved by the Chóla Kings and by Krishnadéva Ráyalu of Vijiyanagar. It is dedicated to Siva, who is believed to manifest himself here in the form of a mysterious and imperceptible current of air. The object of adoration is an ordinary lingam, called the 'Váyu' or wind lingam. It is situated in a retired portion of the building where no breeze can possibly enter, and yet the sacred lamp which hangs suspended from the roof over the idol is never still, but gently sways from side to side. The phenomenon is easily accounted for when it is

understood that there are two lamps, one pendant and the other fixed just below it. The flame of the lower one naturally causes an undulating upward movement of air, which affects the hanging lamp and causes it to sway. This is, however, not generally understood, and the motion is still regarded as a standing miracle. The name of the town is said to have been originally Dakshana Kylásam, since Bramha is believed to have brought down the neighbouring hill from Kylása, the mountain on which Siva resides. It subsequently had several changes of name. The tradition states that a Brahman for his dissolute conduct was born in the form of a spider, and to atone for past follies daily worshipped the lingam and spun a web over it. He was one day burned by the lamp, and in consequence of his piety the place was by Siva called Sripuram, or the spider's town. Next a cobra and an elephant proceeded to worship the idol, the former by placing gems upon it, and the latter by washing it with water. As the elephant's tribute one day disturbed that of the cobra, the reptile entered into the animal's trunk and bit him severely. Agonized with pain, the huge beast ran to the neighbouring hill and dashed his head against it with such force, that he not only crushed his tormentor's body but fractured his own skull. Siva being pleased with their attentions, reanimated their bodies and called the place Srí-kálahasti, the words meaning respectively spider, serpent, and elephant. Putting the syllable 'sri' last, the name becomes Kálahastri, or Kálástri.

A very magnificent festival called the Sivarátri takes place in Kálahastri during ten days in the Tamil month Másí (February-March). The Zemindar, who is a very pious Hindu, sends his elephants, horses, and retainers to take part in the various processions. The chief days are from the fifth to the eighth, during which period as many as 20,000 persons collect. Each bathes in the river before sunrise on the fifth day of the feast, and then visiting the god and goddess, offer burning camphor. All devout Sivaites abstain from food not only during the day but also the night, which they spend in wakefulness, listening to the reading of puranas or making prayers. Women thought to be possessed by evil spirits, or who have no male offspring, go directly after their bath to the figure of the goddess Gnánaprasanámba, and lie before it with their faces to the ground. This is called Pránácháram, and the devotees are believed to gain their objects in proportion to the length of time during which, or the stedfastness with which, they contemplate the attributes of the goddess. On the sixth day the cars are dragged round the four streets of the town, and on the evening of the next day a most gorgeous torchlight procession takes place. All the Zemindar's elephants, gaily caparisoned and carrying gilded and silver howdahs, take part, as well as horses with gold and silver trappings, spearmen, torch bearers, and the like. The crowd is dense and the spectacle is one well worth seeing.

The goddess is of course Párvati, who being cursed by her husband was born in human form. After many years of penance she attained to great wisdom, and is therefore called Gnánaprasanámba, or the flowe-

of supernatural wisdom. The companion of her penance, Durgámba, has a shrine upon the northern hill. There are several other temples in the town, but only one in honour of Vishnu, and it is not thought much of as it is too modern to have acquired any wonderful tradition.

To the south-east of the Siva temple is a peculiar rock cut mantappam with some sculptures, which is called the "Manikanniaghattam," in memory of a woman who prayed stedfastly to Siva until he whispered into her right ear the tháraka mantram. The bodies of those who are at the point of death are often brought to this place and placed upon their right side, the ear resting upon the ground. At the moment of death it is asserted that the body turns round upon its left side, while the spirit passes out of the right ear and attains everlasting bliss.

The big temple cannot be entered by Europeans, but it is said to contain good sculptures. There are several mantappams, one called the hall of a hundred pillars.

Kálahastri is a very thriving town, inhabited by all classes, and carrying on a brisk trade in grain, bangles, and many other articles. A good deal of cloth is woven in its suburbs, but no other industry is deserving of notice. A large proportion of the residents are in the employ of the Zemindar, whose palace, an imposing looking building, faces the eastern street of the old town. He has a large garden of fruit trees, with a bungalow built in it, about a mile beyond the town on the north-east.

Vérpett is a flourishing village, nine miles to the south-west of Kálahastri, where the Venkatagiri and Naidupett roads join. It has a population of 500, is a favourite halting-place for travellers, and does a fair trade in grain. At the foot of a hill west of the village is a small temple of Utáléswara, or Íswara of the spring. Here a perennial stream issues from the ground, and being believed to flow from Benares, is called the Kásibugga.

Máderpák is the head-quarters of the Deputy Tahsildar of the division of the same name, but it is an inconsiderable village with a population of only 580. A great many weavers, Jándras, live here and export their cloths to Madras. Máderpák is two miles distant from Sattiavéd, a large town in the Chingleput District.

Mánellúr is only a mile distant from Máderpák, but is more populous, having 1,500 inhabitants. Here also weaving is the chief industry.

Pennalúr is a large village about fourteen miles to the south of Máderpák, where the Zemindar's Tahsildar has his station. It is chiefly an agricultural village.

KÁRVÉTNAGAR ZEMINDARI.

To readers of Orme this estate is known as Bommaráuze's country, Bommarázu being the poligar at the time of the early Carnatic wars. The

family belongs to the Rázu caste, and plumes itself upon being of pure Kshatria descent. About the close of the seventeenth or beginning of the eighteenth century Geddi Mákharázu and Bopparázu, two young men belonging to a powerful Rázu family in the Northern Circars, set out suitably attended to visit Rámésaram and other celebrated shrines of the south of India. After visiting Tirupati they halted at the village of Maddigunta, where, during the night, a body of freebooters attempted to loot the village, but were attacked and utterly defeated by the Rázus. At that time the estate was in the possession of a Reddi family,[1] and the reigning poligar, Sálava Reddi, hearing of what had happened, sent for Mákharázu and Bopparázu and questioned them regarding their family and plans. Their demeanour pleased him so

---

[1] In an article entitled Numismatic Gleanings (Madras Journal, No. 7, new series, p. 96) Sir Walter Elliot writes as follows:—

It appears from a local history of some merit that the ancient possessors of the Nagaram districts were a family of Sálva Reddis, who migrated with their tribe from the neighbourhood of Pit'hapur, in the delta of the Godávari, to the country at the base of the Nagari Hills about the eighth or ninth century.

One of them, named Sálva Narasá Reddi, obtained the favour of the Chálukya King, Vimaláditya, by his skill as an athlete, and was appointed chief of the country of Seshachalam, or Tripati (where he founded a town called Narasápuram) with permission to use the royal seal, and boar signet. This was in the year S.S. 852 (A.D. 930). During the troubles which followed Vimaláditya's reign and ended in establishing the ascendancy of the Cholas, his grandson, S. Venkatapati Náyadu, was dispossessed, but his son, S. Bhima Náyadu, recovered his patrimony in S.S. 898, and built the town of Ratnapuram, now called Kempula pálem where he founded a temple to Varáha-swámi in honour of the Chálukya family.

A successful expedition into the Carnatic by Kirtti Varma, the Chéra King of Malabar, about the year S.S. 930, in which the Sálva chief sided with the invader, enabled his son Narasimha, a man of ability and enterprize, to assume independence, which he maintained successfully for 35 years to S.S. 979 (A.D. 1057). His possessions extended along the base of the mountains, over the breadth of the Carnatic Bálaghát from the neighbourhood of Vellore to the sea, including the three sacred places of Ghatikáchalam (Sholinghur), Seshachalam (Tripati), and Kshani kachálam (Tirutani). He surveyed and assessed the whole of the lands within this space, reformed the weights and measures according to the Sálva standard, so called after his own family name, and caused them all to be stamped with the figure of the bear. Although his son S. Bhujanga Náyadu was reduced to subjection by the western Chálukya King, Sómeswara Déva, and was carried away a prisoner to Kalyán where he died, these institutions were preserved and have remained up to the present time.

Bhujanga Náyadu's grandson recovered his paternal estate in S.S. 999 (A.D. 1077). They were again curtailed to 24 villages by Raja Raja Déva Chola II in S.S. 1152 (A.D. 1230). But during the next four generations, the decaying power of the Chólas enabled the Sálva family to regain its independence, which was strengthened by the marriage in S.S. 1236 of S. Narasa Náyadu with the daughter of Prolaya Reddi, the founder of the Véma Reddi dynasty of Kondavid in Guntoor.

The family now fell under the rule of the rising empire of Bijanagar, to which the Sálvas continued subject for about 150 or 200 years, when the last of the race was expelled or superseded by the progenitors of the present Bomma Rája Zemindar. Sálva Sesachala Reddi, the then head of the family being without heirs, stipulated only that the annual festivals at Náráyanavaram and Tripati should be conducted in the name of the Sálvas, since which time the new family have assumed the titles of Sriman Rájadhiraja, Salva-Kétári-mahá-rája, &c., and, with insignia of the Sálva family, have maintained undisturbed the rules and institutions established by their predecessors.

much that he persuaded them to abandon the completion of their pilgrimage and to take service under him. Mákharázu soon became his prime minister, and when death carried off Sálava Reddi without leaving issue, his wives committed sáti, and Mákharázu took possession of the páliem, obtained a sunnud from the nabob, and appointed Bopparázu his prime minister. The name of Sálava has ever since been included by the Zemindars among their various titles, and the two, families, continuously intermarrying, have kept themselves aloof from the other Rázus of the neighbourhood. The post of prime minister continued for many years to be hereditary in the line of Bopparázu, and as a petition to the Collector in 1818 describes it, "the two families lived as a united family, and harmony of peace choosed it as its abode." For the last fifty years this excellent arrangement has ceased, and the managers of the estate have often been persons without any personal interest in the prosperity of the Zemindar.

In the eighteenth century a considerable addition to the estate was made. The story goes that when the daughter of Mahommed Ali was travelling from Hyderabad to Madras to visit her father, she halted at the village of Illattúr, east of Nagari. One Báli Naidu, a petty poligar of Balinaidupáliem, hearing that she was well favoured, seized the princess and carried her off to his fort. Upon being released, she hastened in great indignation to her father and made her complaint. As all the poligars of the neighbourhood had at various times been insubordinate, the nabob invited Kálahastri and Kárvétnagar to conquer them and annex their estates. A battle was fought at Nattéri on the east, and the poligars were routed. Half of the páliems were taken by Kárvétnagar and half by Kálahastri, one, Vélurpáliem in the Wálájá Taluk, being given to Ráyoji for the expenses of his nowbut. Three other páliems, named the Chellama, Amidála, and Mattavalam Páliems, on the west of the estate were at or about this time also annexed.

The zemindari is bounded on the north by Chandragiri and Kálahastri; on the east by Chingleput; on the south by Wálájá; and on the west by Chittoor. It has an area of 943 square miles, and a population of 289,894; of these 286,138 are Hindus, 3,737 Mahommedans, and only 19 Christians. It comprises two divisions, Náráyanavanam and Tirutani, but the Zemindar divides it into three taluks, Tirutani, Pallipat, and Náráyanavanam.

The whole of the estate is hilly, except in the south-east. The western hills are bare and rocky like the rest of the gneissic ranges, but the Nagari hills, which are of quartzite and run along the east, are in parts covered with jungle hardly inferior to that of the west of Chandragiri. Between the gneiss and quartzite hills passes the valley traversed by the north-west line of the Madras Railway. Though there is no forest in the west, the hills are covered with scrub jungle, useful for fuel, which is exported into Wálájá, and also sent by rail to Madras. The most prominent feature of the Nagari range is Nagari Nose, 2,825 feet

above the sea ; it forms the summit of a small range, which rises gradually from the east and then terminates in a sheer precipice about 200 feet high, up to the base of which the ground from the west rises. It thus presents an appearance resembling a human nose, and is not only a landmark in the district, but also for ships at sea when coming to Madras from the northern ports. It stands fifty miles from the coast, but is the first piece of land sighted. There is much bamboo growing at the foot of the mural precipices of the hills on their western side, and the numerous ravines or "kónas" which run up into the hills are well wooded and fairly stocked with game. Some of these kónas are particularly pretty, one most charming spot, the Sadásiva Kóna, being about ten miles north-east of the Puttúr station. Here a perennial stream flows to the east, having a succession of waterfalls and cascades, by the sides of which ferns grow in profusion. Tree ferns are here plentiful, and about a dozen varieties, including creeping ferns, are to be found. Other picturesque glens are the Kylása Kóna, Panasu Kóna (both near Nagari Nose), Ammavári Kóna (near Sadásiva Kóna), Múla Kóna, and Narasimha Kóna. At each of these there are a flowing stream, thick forest, and a small rude temple. Annual feasts are celebrated in honour of various deities or rishis who once frequented these picturesque retreats.

About a quarter of the forest area has long ago been given away by previous Zemindars to Brahmans and others who solicited grants of land. Though the gifts were at the time mean, the property has become very valuable since the construction of the railway. Much of the timber is being daily cut to supply engine fuel and for exportation. At present red sanders, vénga, mango, nallamadi, and other trees are found, but the area of forest within easy distance of the line is being greatly reduced.

Three principal rivers drain Kárvétnagar, and are generally named after the towns of Náráyanavanam, Nagari, and Tirutani, by which they flow. The local name for the Náráyanavanam river is the Arunánadi, and for that of Nagari the Kuchastali, or 'darbha grass river.' All three flow to the east, the two first through gaps in the Nagari range. They are dry except during the rains, but have excellent springs.

There are 795 villages in the estate, of which 405 lie in the Náráyanavanam Division, and 390 in that of Tirutani. Many of them have been alienated as ináms. About 60 per cent. of the land is uncultivable on account of its hilly nature. Of the rest one half, or 125,000 acres, is said to be under the plough, and as much left waste. Indigo is much cultivated in the east and sugarcane in the west. The soils are rich loam and red clays, and exceedingly fruitful, Kárvétnagar being the most fertile division of North Arcot. Manure is plentiful and freely used by the ryots, who are hardworking and intelligent, mostly Rázus in the north and Kammas in the south ; good farmers both of them, who get magnificent crops out of the ground, and are in very good circumstances although the assessments are high. They vary from village to village,

and depend upon the crop raised. The rates in one large village, Nagari, may be taken as a specimen.

	Rs.	A.	P.			
1st-class wet for samba paddy =	4	3	6	+ 1,600 lbs. of paddy per acre.		
Do. do. kar do. =	3	12	0	+ 1,225 do.	do.	do.
2nd-class do. sumba do. =	3	12	0	+ 1,225 do.	do.	do.
3rd-class do. do. do. =	3	4	6	+ 1,100 do.	do.	do.
4th-class do. do. do. =	3	4	6	+ 850 do.	do.	do.
5th-class do. do. do. =	2	13	0	+ 600 do.	do.	do.
Topes .. .. =	13	9	6	per acre.		
Plantains .. .. .. =	15	12	0	do.		
Chillies .. .. .. =	11	12	0	do.		
Ground-nuts .. .. .. =	8	8	0	do.		
Cocoanuts .. .. .. =	15	2	0	do.		
1st-class dry land for indigo .. =	4	8	0	do.		
2nd-class do. do. =	3	12	0	do.		
1st-class do. kambu or rági .. .. .. =	4	4	0	do.		
2nd-class do. varagu .. =	2	8	0	do.		
Do. do. gram and ground-nuts .. .. =	1	2	0	do.		

The rates are fixed at so much a gunta, 18 guntas of wet and 16 guntas of dry land going to an acre. Sometimes cowles on favourable terms are given, only three-fourths of the assessment being demanded, or sometimes as little as one-eighth. The whole subject is in the utterest confusion; there is no uniform principle followed, and the constant disputes between the Zemindar and his tenants lead to suits under Act VIII of 1865, which occupy much of the divisional officer's time.

Properly administered, Kárvétnagar should produce at least nine or ten lakhs, but it at present yields only about seven to the Zemindar. A great deal finds its way into the pockets of those who have to do with the revenue on its way to the treasury. The ryot cultivates land which the curnam does not record, and pays a bribe to the village officers to keep the matter quiet. These do the same to the superior revenue officials, and so peculation and fraud are rife. It is usual for the Zemindar to demand a lump sum, called "mégóle," from the headman as an advance on the security of the village collections. When the account is rendered the advance is deducted with interest. The estate is very much involved, and the embarrassments are not of recent date. In 1846 there was a debt of nine lakhs, and the Civil Court, after attaching the zemindari, ordered its sale. The Collector was authorized to buy it in at a fair price, but meanwhile the Zemindar made terms with his creditors, and the sale was countermanded by the Judge. The Collector, however, maintained that the appointment of a manager by the Zemindar, which was one of the conditions of the compromise, was invalid, since he had

not approved of it, carried out the sale, and knocked the estate down to Government for Rupees 1,60,000! Eventually it was handed over to the Zemindar.

No information can be obtained regarding the sources of irrigation. Almost all the tanks are in bad order, little being spent in repairing them. They are constantly breaching, and as often patched up by the ryots. The largest is that of Ráyalcheruvu in the north-west, which has an ayacut of 1,600 acres and yields a revenue of Rupees 20,000. Iron is found in many places, but is only worked near Páthagunta. Lime and granite are plentiful and of excellent quality.

The chief manufacture is weaving, which is carried on in the south by Kykalars, and in the north by Sálias, both of whom only manufacture the ordinary male and female clothing of the country. The principal weaving villages are Náráyanavanam, Pálamangalam, Ammavárikuppam, Shorakáyapetta and Vanganúr. At Nésanúr, in the Náráyanavanam Division, many bamboo mats, baskets, winnows, &c. are made, and at Satraváda brazen utensils. At Agúr, near Tirutani, a peculiar manufacture is carried on by one man. It consists in the cutting of goglets, tumblers, &c. out of a dark stone called "Maddúr silai," which is quarried at the base of a hill near Maddúr, ten miles distant from Tirutani. The mason is known as the Agúr Stápathi, and is in such independent circumstances that he only works as a favour for friends or officials, and has no fixed charge for his wares, though he is not above accepting a present. The stone is both turned in a lathe and chiselled; idols and representations of animals are skilfully cut by him when he chooses, which is not often. No other artificer can approach him in skill, though several masons work in the Maddúr stone.

The following are the roads which exist in Kárvétnagar:—

	Miles.
Nagari station to Bálapalle	20
Karvétnagar to Nágalápuram	21
Kárvétnagar to Sholinghur	7
Kylásapuram to Chittoor	25
Tirutani to Sholinghur	14
Tirutani to Arkónam	4
Tirutani to Rámagiri	13
Sholinghur to Molagakuppam near Ponné	10
Tiruválangád to Chinnamápett	3
Total ..	117

Kárvétinagram is a large place, having a population of nearly 7,000, and has long been the residence of the Zemindars. It is named after Kárvétirázu, the son of the celebrated Bommarázu. The latter founded Bommarázupáliem, a village close to Kárvétnagar, and lived there; but his son preferred the site of the present town, where, the local history

narrates, he was pursued while hunting by a tiger, and was rescued by a hare which attacked and drove off the beast. Bommarázupáliem is now in ruins. It had two temples, one of Siva and one of Vishnu; the idol of the latter was moved to the new settlement, but Kárvétirázu was warned in a dream not to meddle with the other, and it is still worshipped in the deserted village.

The town is seven miles west of Puttúr, from which place a road runs to it over a steep ghaut. It is therefore on high ground, and being surrounded by hills and jungles is a very feverish place. Formerly it was strongly fortified and surrounded by a broad wall eight feet high, having two gates, one on the south and one on the east. The southern approach was defended by four barriers and a redoubt, and the eastern by six barriers, all built of stone. Only traces of these works now remain. There is nothing very interesting about Kárvétnagar. The chief building is the Zemindar's palace, an imposing edifice of quite modern construction. In one of the outer buildings is a printing press, in which forms used in revenue business are struck off in Telugu. On one side of the palace is a large gunta dug by the present Zemindar during the famine of 1866, and deepened during that of 1877. On account of its unhealthiness Kárvétnagar is not a favourite residence with natives. About three miles to the south-east of the town is an old hill fort called Mákharázdrúg, of small size and no strength, built by Mákharázu, the first Zemindar of the present family, as a suitable place of retreat for his zenana in time of war. It is surrounded by difficult country, and has the ruins of several buildings upon the top of the hill.

Náráyanavanam is one of the most ancient places in North Arcot, situated on the banks of the Arunánadi three miles east of Puttúr, and having a population of about 4,500. It lies at the base of the Nagari hills, in the gap through which the river flows to Nágalápuram. The population is largely composed of Sália and Kykala weavers. The Zemindar's brothers live here, as well as the descendants of the dispossessed Poligar of Matla in the Cuddapah District. The scenery in the neighbourhood is very bold, and the hills well stocked with game.

As its name implies, the site of Náráyanavanam is believed to stand in what was once a forest much frequented by Vishnu. The *genius loci* is one Ákásarázu, an ancient king of the country. His capital was called Ákásarájapuram or Náráyanapuri, which is three miles south of the present town, where are the remains of two old forts standing on either side of the river. The southern fort is known as the Akásarázukóta, and has a very ancient temple dedicated to Agathéswara, or 'Siva of the moat,' situated close to it.[1] The northern fortress stood within the limits of the village of Kempulapáliem.

---

[1] In the article already quoted Sir Walter Elliot writes—

"The traditions relative to the prevalence of the Chálukya influence in this tract, are confirmed by inscriptions extant in the temple of Agastíswara Swámi in Narayanavaram, the principal town of the district. One of these records a grant to the temple, of the

All traditions agree in stating that Náráyanavanam was a very important place in the olden time. It must have been one of the Kurrumba strongholds, which fell into the hands of Adóndai. A local manuscript states that this king was here succeeded by his lineal descendants Sundama Rájah, Surasira Rájah, and Náráyana Rájah. In Mithila lived a king, named Govasambana Rájah, who visited Tirupati and prayed the god to allow him to rule over the surrounding country. He was referred to Náráyana Rájah, great grandson of Tondiman Chakravarti, who gave him half his kingdom, with Náráyanavanam as its capital. Govasambana Rájah had four sons, Venkata Rájah, Ubajala Rájah, Ákása Rájah, and Mitraverma Rájah. The son of the last, Ákása Rájah, obtained the kingdom, and his daughter married the Tirupati god. His son Vasambana Rájah being childless, the kingdom went to his uncle Venkata Rájah, who was succeeded lineally by Sundu Rájah, Akanasana Rájah, Parakruti Rájah, Adrika Rájah, Malutha Rájah, Vikata Rájah, and Ribanda Rájah. In the days of the last named the kingdom was conquered and the Ramarajah Rájah dynasty followed.

What dynasty this was seems uncertain, but it is known that at Náráyanavanam eleven kings of the Yádava line ruled, being perhaps Kurrumbas, who succeeded in recovering a portion of their lost territory. They gave way to the Vijianagar kings. The legend narrated of Ákásarázu, the adoptive father of Padmávati, the wife of Venkatéswaraswámi of Tirupati, is this. Being without issue, he resolved to perform a "putra káméshti yágam" in conformity with the rules of the shastras, and while ploughing with a golden plough the land now covered by the waterspread of the big drinking tank west of Náráyanavanam, he turned up a golden lotus, in the petals of which lay a most beautiful golden-hued female infant. Carrying her to his wise men, the rájah learned that the child was the incarnation of Laksmi, and he therefore had her nurtured with care and brought her up as his daughter, calling her Padmávati, "the lotus born." He performed his yágam and begot a son. After Padmávati had grown up, Venkatéswaraswámi of Tirupati came hunting in the forest and fell desperately in love with her. Negotiations were completed, and money for the marriage being borrowed from Kubéra, it was celebrated at Náráyanavanam with great pomp. At

---

village of Vikrama-tángal, *alias* Chálukya-puram, by Naga-déva of Vélurpákkam, who had received it, with others, in reward for services rendered to the general of the Chálukya forces, in an engagement with the enemy then occupying the Pótappinádu (or Kálastri) country. This was made in S. S. 826, in the 11th year of the reign of Kulót-tunga Chóla (probably Rajéndra Chóla).

Another inscription in the temple of Parásara, in the same town, records the gift of the village of Kandyan by one Pallava Ráya, who had received it from Nágadéva, the lord of Pótappinádu, in the 13th year of Uttama Chóla, or S. S. 1027.

A third, in the temple of Agastíswara Swámi, contains a royal grant of certain lands to the temple, in the 6th year of Tribhuvana Malla Déva, with the titles of Sarvalokáśraya, the ornament of the Satyáśraya Kula, conspicuous among the Chálukyas, &c., in S. S. 1078 corresponding with A. D. 1151.

Ákásarázu's request the swámi consented to reside at Náráyanavanam, and a temple was built for him and his consort, where he is worshipped as Kalliána Vencatéswara, or Vencatéswara married.

In Kempulapáliem is a temple which enjoys a greater repute than most others in this part of the country. It is dedicated to Amanáyáchiámba, or "her whose eyes are the védas," also called Mahisasúramardani, or the slaughterer of the rákshasas, and she is one of the four furies (saktis) who sprung from Bramha's yágam at Conjeeveram and were sent by him to guard the four quarters at Mahábálipuram (the seven pagodas), Devikápuram (in Arni), Virinjipuram (in Vellore), and Náráyanavanam. The idol, the length of whose foot is the standard of measurement in this zemindari, is a most terrible looking female figure, about eight feet high, perfectly nude, but with a garland of heads of rákshasas modestly arranged around her waist. She has eight hands, holding a cup of blood, a buckler, and various weapons, and with her foot she tramples upon the prostrate form of Sómakásuran, one of the rákshasas. The pujáris affirm that a golden-coloured snake visits the sakti every Friday, but it is invisible, and only makes its presence known by emitting a fragrant odour. The great feast continues during fifteen days in Ávani (June–July), but the chief days are the last eight, during which a small representation of the goddess is carried about the villages. On the twelfth day, Tuesday, the Kammálas and Yékaris disguise themselves and pretend to fight with a rákshasa, whose head they eventually bring and lay at the goddess' feet. In the evening a he-buffalo is slain by a Pariah opposite to the temple and in front of the goddess. Some of its blood is sprinkled over a huge pile of food, which is then scattered about the temple. The buffalo is buried in a pit close by, which contains the remains of the victim of the previous year. The pit is opened with much ceremony at daybreak, and the remains of the previous year's victim are sent to the Zemindar, as their appearance is supposed to foretel the nature of the succeeding season. The bones and flesh are always found to have decayed, but the contents of the stomach remain. If it looks fresh the year will be prosperous; if decomposed, the crops will be bad; and if a coating of white has formed, epidemic disease will be common. The explanation seems to be this. The chances are that a wet season will be followed by a dry one, and *vice versâ*. During damp weather the dung rapidly decomposes, but remains unaltered during a dry year. Where the matter, therefore, has lain for a year in dry soil and is fresh, the chances are that the following season will produce good rain. The Zemindar has a great respect for the sakti, and vast crowds attend the feast, sacrificing sheep, goats, and fowls. On the following Thursday the Kykalars have a great festival, prancing about on hobby horses and enacting a fight which their ancestors are said once to have had with a Vellála king who lived in the bed of the Veránam tank of the Wálájá Taluk. Amanáyáchiámba then assisted them in overcoming this potentate, who greatly oppressed them.

The temple is by no means a fine one. It stands within the enclosure of the Ákásarázukóta.

Nagari is a town with a population of 2,400, lying five miles south of Nagari Nose on the banks of the Kuchastali. It is a very busy trading town, visited by merchants from Madras for the purchase of rice, indigo, and ground-nuts. The rice raised in the neighbourhood is of a very superior quality, and said to be much appreciated by the Brahmans of Madras. The town has the largest fair in the division, and a most commodious choultry. The houses are well built, but laid out in a straggling fashion. Nagari was once a city more than a mile in diameter, and therefore obtained its name, which signifies "the city." The sakti temple (Désamma's) is now a mile to the west, and as sakti temples were always built within the circuit of a town, Nagari must have extended so far to the east. Kásivisvanádhaswámi's shrine, now destroyed but formerly standing on the banks of the river, was also within the town, as was the Sámalamma tippa on the north. Ryots when ploughing still turn up small household idols, and in digging have come across backyard wells that have become filled with rubbish. All these facts, with others, go to corroborate the local belief that the place was formerly large and prosperous. Its surviving temple, Karakantéswara's, is believed to have been built by Janmé-jayya Maharájah, vaguely described as having lived before Ákásarázu's time. In those early days the large Parvét mantappam, now outside the town on the north, was built to receive Agathéswara Swámi of Kempulapáliem when he made his annual circuit of the hills. As many as a hundred other local idols used to meet him there, in order to go hunting with him, but some years ago there was a dispute as to whether it was a Vishnu or Siva mantappam. The Zemindar, Kárvéti-rázu, decided in favour of Siva, and now not more than thirteen Siva idols come, and having saluted Agathéswara, go home again. Upon a large flat rock in the middle of the bed of the river is a long inscription, which might, if deciphered, cast some light upon the history of the place; but it looks too clear to be very ancient.

Among the hills north of Nagari are some caves which, by means of rough stone walls, have been turned into habitable chambers, and the people ascribe the work as usual to the five Pándavas.

Four miles to the east of the town, on the banks of the river, is the village of Bugga Agraháram (bugga = a spring), where a copious spring of water rises within the temple, and escaping by five vents falls into the river. Four of these fail in times of excessive drought, but one is perennial. The water is believed to come from the Ganges, and the village to be as holy as Benares. Nagari Nose is also regarded as a very sacred spot, and has a Vignéswara temple on its summit. On each full-moon night a bonfire is kindled at the top of the Nose, and early in January the local idols make their circuit of the hill, meeting, as has been said, at the Párvéti mantappam.

Puttúr or the new village, is only of importance on account of its having a railway station, which serves Kárvétnagar and Náráyanavanam, and being the head-quarters of the Deputy Tahsildar of the Náráyanavanam Division. Its population is about 2,000, of whom a large proportion are weavers. The streets are broad, regular, and cleanly, the houses good, and the village a prosperous looking one.

Ráyalcheruru, or Ráyalcheruvupetta, is only noteworthy on account of its large tank, built, it is said, by Krishnadéva Ráyalu of Vijianagar, whence the name of the village, "the Ráyal's tank." The bund is only half a mile long, resting upon two hills, but is 70 feet high and 120 feet broad. A story is told in the village that when first built the tank leaked most persistently, and no remedy proved efficacious. It was revealed by a dream to Krishnadéva Ráyalu, that only a human victim, buried alive in the bund, would render it watertight. One of his daughters, learning this, offered herself, and being buried where the leak occurred, a perfect cure resulted. The village was once of some importance, being on the road from Tirupati to Conjeeveram, but pilgrims now travel between these towns by rail. There is still a large choultry in Ráyalcheruvu, endowed by the Zemindar with lands producing Rupees 7,000 a year, in which pilgrims are fed gratuitously.

Tirutani is a very sacred town in the south of the zemindari, having a population of 2,250. It includes four villages, Tirutani proper, Mattamgrámam, Nallanigunta, and Amurtapuram. Tirutani proper is built to the south-east of the hill upon which the temple stands, and close to the railway line. It is the largest of the four settlements, and has, like the others, excellent houses. Mattamgrámam is the most holy village, and lies partly upon the hill and partly upon the comparatively level ground to the south of it. It derives its name from the large number of mattams, choultries, and mantappams which it contains. There are upwards of 60 mattams, 10 choultries, and 23 mantappams in it, all built originally for public use, though many have now been appropriated by individuals, and are used as private residences. Nallanigunta is also remarkable for its collection of mattams and mantappams, and lies to the east of Mattamgrámam, near a large drinking water tank called the Aiyenkulam. It takes its name from a square tank, constructed about 80 years ago by a Kykala named Nallani. It is therefore of modern growth, as is Amurthapuram. This latter village is the farthest of the four to the west, and contains at present the Deputy Tahsildar's office and Police station; but the former is shortly to be removed to the neighbourhood of the railway station. It was, it is said, founded by Venkataperumálrázu, grandfather of the present Zemindar, who once halted here much wearied, and being refreshed with milk and buttermilk, gave it its name, signifying the village of ambrosia. Much trade is carried on in these villages in grain and cloths during the festivals which occur once in every lunar month, and are called the Nákshattra feasts. Large crowds collect at all of them, but more particularly in the

months of Ádi, Kárthiga, and Másí. Bramha-utsavams also take place for ten days in Másí (February–March) and Chittri (April–May).

The temple stands upon a low range of hills and commands a good view of the surrounding country, except towards the south, where the view is blocked by higher hills. It is dedicated to Subramaniaswámi, with whom reside his two wives, Dévaséna and Valliammál. Its history narrates how Subramaniaswámi warred against certain rákshasas named Súrapadmásura, Simhavaktrásura, and Thorakásura, whom, after a valiant struggle, he overcame. He then enjoyed a grateful rest here, on which account it is called Tirutani, or sacred repose. Indra out of gratitude gave him his daughter Dévaséna in marriage. The story of Valli has been told in connection with the Vallimalai temple in Chittoor. Here Valli is described as the daughter of Vishnu by Lakshmi, after the latter had been metamorphosed into a deer. The child was found by a Korava (? Kurrumba) king of Spatikanagari on the Lovali hills (the present Vallimalai), and was called Valli because she resembled a creeper. Until a few years ago it was usual for devotees to cut off the tip of their tongue and present it as an offering to the idol, but the practice has been discouraged by threats of criminal prosecution, and an instance has not occurred lately. The tongue partly renews itself, and this is considered miraculous. It is asserted that the severed portion of the tongue, when dropped into milk, makes it boil over!

The ascent of the hill is by means of two flights of stone steps on the east and west. That on the east is flanked by numerous choultries, but the eastern ascent is too steep to admit of many buildings. It leads to the lower Mattamgrámam, a congeries of spacious choultries, mostly round a very fine tank surrounded by cut stone steps. The Pandáram residents gain a livelihood by begging and keeping the choultries in order, for which pilgrims give them small presents. The streets are broad and flagged with granite stones. Many of them have a steep slope. Almost all the houses here are built of stone, which can be quarried close by.

One of the distinctive features of Tirutani is its sacred pools of water, of which there are nine, called the Kumára, Bramha, Agastayya, Indra, Vishnu, Nárada, Sésha, Ráma, and Saptarishi tírtams, each having a legend attached. In the temple itself is the holy Kylása tírtam. There are also nine separate lingams, with names corresponding with those of the nine pools given above.

On the south of the hill is a tope surrounding a pool called the Yédu Jonalu, or seven pools, around which are built the temples of the seven celebrated virgins and Virabadraswámi.

Pallipat is the next most important place in the Tirutani Division, and has a population of 1,100. It is now remarkable for its agricultural industry, the lands in the neighbourhood being very rich and yielding excellent crops of sugarcane. It is 23 miles to the north of Tirutani, and on the banks of the Kuchastali. Once Pallipat was a large military

station under the Mahommedans, and boasted a mint in which Pallipat pagodas were coined. Close to the town is Veligaram, considered a very sacred place, and said to be of great antiquity.

Tiruválangád, or "the sacred banyan forest," is another very holy village in the Tirutani Division. It is three miles distant from the Chinnammápet railway station, in the south-east of the zemindari, and has a population of about 1,600. The town consists of three broad and parallel streets, leading up to the front of the large and ancient temple, which alone makes the place of importance. Here Siva is worshipped under the name of Dévarasingaperumán, and his goddess under that of Bramarálakámbiga. The story goes that Párvati, pleased with the assistance rendered to her by Káli in the contest between herself and the monster Ruktabigan (who obtained from Bramha the privilege that every drop of blood shed by him should become a monster powerful as himself), bestowed upon the malignant goddess many gifts and blessings. Elated with these, Káli harried the country, killing and devouring all men and beasts that she met. At last she came to the banyan forest where she met the celebrated Nárada, who narrowly escaped her. Nárada complained to Siva, and the god visited the forest with his followers. Káli was persuaded to enter into a dancing contest with him, the penalty of defeat being submission to the successful competitor. Siva was of course successful, and Káli was ordered to reside quietly by the god's side in that locality, where the people erected a temple to accommodate the pair. Of the sixty-four places in which Siva is reputed to have danced, Tiruválangádu claims to rank first. The chief feast (Bramhautsavam) takes place in Panguni (March–April), and in Márgali (December) the Árudra festival occurs. Both are largely attended, and the temple is also frequented by devotees throughout the year, the goddess being supposed to have great power in curing ailments, granting male offspring, and the like. It is asserted that during the Árudra feast, when the idol, being taken in procession, reaches a particular spot in the town, a number of Brahman kites suddenly appear, and soar over it in circles always from left to right.

Kanakamma chattram is a large trading village not far from Tiruválangád, upon the old trunk road which led from Tiruvallúr to Tirutani. This used to be much frequented by travellers from Madras, but has long been abandoned, and the village has doubtless declined in consequence. It now has a population of 600. It is a modern place, which has sprung up around a large choultry built by one Rámabadra Naidu, Poligar of Chinnanaidupáliem, for the convenience of the numerous travellers who passed along the road. His mother Kanakamma had intended to construct the building, but died before doing so, and he attached her name to it and had food distributed free of charge. The charity ceased, probably when the páliem was wrested from the poligar by the Kárvétnagar Zemindar, but has of late years been continued on a smaller scale by the Kómati community, which has taken possession of the place.

They form the bulk of the population, and are in affluent circumstances, buying up the agricultural produce of the surrounding country and exporting it to Madras.

Rámakrishnamaharájapet is a large village about eleven miles from Tirutani and about three from Sholinghur. Its population is about 3,000, and a fair trade is carried on in grain and cloths which are largely woven here.

Aringulam is a flourishing village eight miles east of Tirutani. It has a Jain temple of great repute, dedicated to Dharmaságara Swámi, the fifteenth tírtankara, though Parsavanádha Swámi, the twenty-third tirtankara, is also worshipped. There is a remarkable stone in the village bearing unintelligible characters, which is believed to have great power in curing cattle disease.

PUNGANÚR ZEMINDARI.

The family of the present Zemindar is said to have settled in the country as early as the thirteenth century, and to have been in possession of considerable territory, which is not now included in the estate. One Síthappa Gouniváru, leaving his own village of Mudwarapúr, the position of which seems unknown, came with his close relatives, composing seven families, by way of Conjeeveram and settled at Varigapalle in the Chittoor Taluk. After residing there for a short time the immigrants in S.S. 1172 (A.D. 1249) moved to Sungatúr, founded a city, built a fort, and constructed a pagoda which they dedicated to Chennakéswara Swámi. At the close of the fifteenth century the head of the family, Timmayya Gouniváru, found some hidden treasure, which, in 1479, he expended in clearing the country round the present town of Kólár. He founded that place and built its fort. He was succeeded by his son Immidi Timmayya Gouniváru who is said to have driven away Adil Sháh when he attacked Penukonda in the time of Krishnadéva Ráyalu, for which act the latter gave him the title of ráyalu and the district of Anikal, near Úsúr, without obligation of tribute. In 1510 he built Uskóta and Jangamkóta, towns about ten miles apart, and twenty or thirty miles west of Kólár, and seven years later he fortified Anikal. His sway at this time extended over Kólár, Sungatúr, Anikal, Uskóta, and Jangamkóta, but at his death his two sons divided these territories, the elder Chikkarayya Timmayya, from whom the present Zemindar is descended, taking Kólár and Sungatúr. About this time Vellore was seized by the Vijianagar Rájah, whose family while travelling was attacked by a freebooter named Virappa Naidu, who was carrying off the women and treasure when the poligar intercepted him, and restored the prisoners and property to the rájah. In return he

received various presents and titles, as well as the distinction of the nowbut, for the maintenance of which Pílér and Gútikal were given in jaghire, with the admonition to destroy the Bóyas, or petty poligars, and assume their possessions without obligation of peshcush or nuzzer. The poligar accordingly fortified Gútikal, seized Saddam and Kandúr, and going to Ávulapalle, conquered the Bóyas and settled that district. He then built the fort of Punganúr, but continued to reside at Kólár. As his son Chikkarayya Basava Gouniváru was only six years old at the time of his father's death, an aunt named Hulsammál became regent. During her regency Tanésha Pádshah, of Bíjapúr, sent Ranadhulla Khán into the country, who invested Kólár and Úskóta. Hulsammál retreated with her nephew to Ávulapalle (A.D. 1639), leaving a garrison at Kólár, which surrendered, and Úskóta, Jangamkóta, and Sungatúr were seized. The sultan confirmed the young poligar in possession of Punganúr, Saddam, Kandúr, Pílér, Gútikal, and Anikal, and issued a sunnud. Vírachikaráya, son of Chikkaraya Basava Gouniváru, about this time visited Hyderabad, and was well received, obtaining presents and the title of Bahadur, and being ordered to pay tribute to the Cuddapah Nabob. This arrangement continued for some time, but the peshcush fell into arrears and the next poligar, Immidi Chikkaráyalu, was deprived of the Pílér and Gútikal divisions. His son Mummidi Chikkaráyalu fell fighting against the Mahrattas on the side of Abdul Mahsim Khán, Nabob of Cuddapah, in 1757. The nabob was himself slain, and half his soubah, including Punganúr, was taken by the Mahrattas. From them it passed to Hyder after twenty years of contest between the Nabob, the Mahrattas, and Mysore, during which time Punganúr paid tribute sometimes to one and sometimes to another. In 1775 Hyder's brother-in-law, Mír Sahib, resumed Saddam and Kandúr, but by Hyder's order they were for a time restored and then resumed again. In 1780 Pedda Chikkaráyalu followed the Mysore army into the Carnatic, and died before Wandiwash. His son succeeded, but as he did not pay his tribute he was, in 1785, obliged to fly to Ávulapalle from Tippu's anger. During the Mysore war he materially assisted Lord Cornwallis by supplying transit and provision, and at the conclusion of peace was confirmed by Tippu, but shortly after forced to seek safety in the Company's possessions. After the last Mysore war he once more returned to his estate, but he and his successors only managed it as Tahsildars or lessees for many years.

In 1832 the poligar died without issue, and a dispute arose regarding the succession. He left two widows, each with an expectation of offspring. One bore a daughter, and the other miscarried, so the succession went to the brothers. Of these, the elder, was alleged to have been adopted out of the family, but Government recognised him, considering the adoption not proved. In 1841 he died, leaving two sons, of whom the elder, who is now the Zemindar, was only 11 years old. His uncle at once seized possession of the treasure, but died within a year while an

inquiry into his misconduct was being made. The minor was installed in 1847, but did not obtain a permanent sunnud until 1861.

The estate is about 523 square miles in extent, and is situated above the ghauts in the north-west corner of the district. It is bounded on the west by Mysore; on the north by Cuddapah; on the east by the Chandragiri and Chittoor Taluks; and on the south by the Palmanér Taluk. The population is 109,282, of whom 105,046 are Hindus, 4,049 Mahommedans, and 187 Christians.

The natural features of Punganúr are those of the rest of the Mysore plateau. The hills in the centre and east are higher and bolder than those in the west, and are covered with a larger and denser growth of jungles. The south-eastern portion is drained by the Koundinianadi, which passes through Palmanér into Gudiyátam, and the waters of the north-west flow northwards, uniting eventually with the Bahuda river of Cuddapah. The finest jungle occurs in the east, extending a distance of two miles between Ávulapalle and Chedambaile, and passing for some distance down the Ávulapalle gorge towards the Chittoor Taluk. The Parikidona jungles on the west and the Basavapuram jungles on the south deserve notice, not so much for their forest wealth as for their affording extensive pasture grounds, which are rented out as such by the Zemindar. A very excellent breed of cows is raised here.

In the hilly and wooded portions of the estate large game is pretty plentiful, and until twenty years ago some elephants were found.

Any amount of excellent granite can be got all over the zemindari, and lime is plentifully found at Punganúr, Saddam, Palamanda, and to a less extent in many other places. Iron sand is collected in most of the hill streams, but chiefly near Ávulapalle, Kandúr, and Chembakúr. It is very extensively worked, and the metal, which is much preferred to any that can be imported, is chiefly sold in the Soudapalle fair. It costs more than foreign iron, and is converted into ploughshares and heavy bill-hooks of a pattern peculiar to this part of the district. The workmanship is good, but the tempering might be better.

The number of villages in Punganúr is 643, excluding 131, which are bécharák or deserted, and including 126 granted to various persons as inám. As in other parts of the plateau each considerable village has its keep, and is also sometimes surrounded by a stone wall.

The sources of irrigation are said to be 1,374 tanks and 1,147 wells, besides several river channels, the number of which is unknown. The number of the tanks, even including mere puddles, is probably exaggerated; the wells are not numerous owing to the lowness of the water level and the hardness of the ground. The chief tank is that of Sankararávapet, fed by the Koundinia river. It was built by the grandfather of the present Zemindar, and has a high, broad bund, about a mile in length, under which 1,200 acres of land are irrigated. At Ráyalpetta and Yerikipenta are other large reservoirs, irrigating between 300 and 400 acres each.

There are twenty-four rates for wet lands, varying from Rupees 17 to Rupees 11-10-0; and thirty-six for dry lands, varying from Rupees 15-14-10 to Annas 1-2 per acre. These rates were fixed in 1805, and have not since been modified. The soil is a light loam, hardly less fertile than that of the adjoining taluk of Palmanér. The extent of sugarcane cultivation is comparatively great, and large quantities of jaggery are manufactured and exported from the division. The revenue for a series of years is stated to have been as follows :—

Fasli.	Wet.	Totakal.	Dry.	Total.
	Rs.	Rs.	Rs.	Rs.
1281	58,123	815	38,895	97,833
1282	64,649	850	42,634	1,08,135
1283	61,108	823	40,604	1,02,535
1284	77,129	902	41,019	1,19,050
1285	29,744	513	40,421	70,678
1286	25,893	349	39,045	65,287
Average ..	52,941	709	40,453	94,103

The extent of land under cultivation is—dry about 32,000 acres, wet about 9,000 acres, and garden about 400 acres, that is, a little more than 40,000 acres in all, or about one-eighth of the area of the zemindari. The actual extent of land cultivable is not known, but it must be considerable, and were the population larger a great deal could be brought under the plough.

Besides agriculture the other industries are the weaving of coarse cloths and still coarser cumblies, and the manufacture of iron implements already referred to. The cotton cloths are mostly produced by Pariahs, and the cumblies by Kurrubas. There are also a few braziers, who are tolerably skilful. The exports are chiefly tamarinds, sugar, jaggery, gram, and a good deal of jungle produce in the shape of tanning barks. The imports are almost confined to salt and fine cloths.

The means of communication are the following :—

1.	Palmanér to Madanapalle (Cuddapah) ..	34 miles.
2.	Punganúr to Kallúr	30 do.
3.	Punganúr to Rámasamudram	10 do.
4.	Punganúr to Sankaráyalpet	9 do.
5.	Soudapalle to Kandúr	10 do.
6.	Soudapalle to Kallupalle	14 do.
7.	Samala to Nanjampet	3 do.
	Making a total of ..	110 miles.

The first two roads are in good order, but the other four are not, having only been made during the famine.

Punganúr.—This is the only considerable place in the zemindari, having a population of nearly 9,000 persons. It is the residence of the Zemindar and of the Deputy Tahsildar in charge of the division. The name in derived from one Pungamma, who, with the assistance of a sister Takkamma, is believed to have built the large tank which irrigates the lands near the town. Who these sisters were is not now ascertainable, but they are said to have lived before the present Zemindar's family settled in the country, and to have been very poor. Soon after its construction the tank breached, and all efforts to fill the gap failed until Pungamma sprung into it, and ordered the people to throw earth around her. For thus sacrificing her life in order to benefit the people she was elevated to the position of a sakti, and a temple upon the bund was built, in which she was worshipped until the present family obtained Punganúr. For many years after her death Pungamma's spirit is said to have conversed with the people in the darkness of night, and to have lent jewels to them; but at last a mean advantage was taken of her amiable conduct, some jewels were not returned, and from that day she ceased to speak.

The town is fairly built, the houses being mostly of the low terraced kind. A good deal of trade in the products of the zemindari is carried on, and once a year, in April, after the local festival in honour of Mánikiaráyaswámi, which attracts great crowds, a large fair is held, when several thousand of cattle are exposed for sale. The Mysore bullock is chiefly represented, and for a pair of these as much as Rupees 600 is said to have been recently paid. In the centre of the town is the Zemindar's palace, a large and somewhat ancient building, in which accommodation for European travellers is set apart. In front is a spacious courtyard containing several dens in which wild beasts are confined, and a museum in which is a strange collection of curiosities, the most remarkable being life-sized models representing various native castes in their usual state of dress or undress. The walls of the old fort encompass the palace and grounds. It is a rectangular structure, with occasional bastions and an encircling ditch, but the latter is almost filled up, and the walls have been partially dismantled.

In the town is a fine drinking-water tank, surrounded by beautiful stone steps, and having a mantappam in the centre. It was built about 150 years ago by a female ancestor of the Zemindar, and is largely used. A mile and a half from the town are the ruins of a large Roman Catholic chapel bearing the date 1780, but only a very few Christians now remain in the neighbourhood. The Zemindar has built a neat little school-house in the town, which was much wanted as education is very backward in this part of the district. He has also constructed, a mile east of the town, a small bungalow surrounded by a large garden tastefully laid out. The climate is admirably suited to the cultivation of roses and other flowering shrubs.

Rámasamudram is about 10 miles to the west of Punganúr and close to the Mysore frontier. The population amounts to 3,000, but beyond having a largish village fort and a pagoda it possesses no particular interest.

Soudapalle lies about ten miles north-east of Punganúr, and has a bazaar in which iron, steel, and cumblies are the chief articles of commerce. Its population is about 2,700, and it is chiefly remarkable for a temple, which for the plateau is of superior workmanship, and contains some fair carvings. In front is a fine monolith about 60 feet in height, of graceful proportions.

Kandúr is a good sized village in the north-east of the estate, with a population of 4,000. The old village wall has been almost obliterated, but the stones of the gateway remain in position. The old citadel is also in ruins; within it stands a small Hindu temple. The village has the advantage of having two good sized tanks, and the people are mostly engaged in agriculture.

Ávulapalle, or "the village of cows," is a very old village, and has been a large one, but it is now nearly deserted for Upparapalle, about a mile south of it. There are the remains of an old palace of the Zemindars, with whom Ávulapalle was a favourite resort for sporting purposes. There is an ancient temple with carved pillars supporting a portico, but the roof of this has fallen in and adds to the deserted aspect of the place. On the opposite side of the river, at a distance of about a mile from the village, rises a high hill called the Ávulapalle drúg. On its summit is an extensive but ruined fortification of some antiquity, built by the poligars who ruled the country before the present family got possession. It is admirably situated to command the steep pass leading down through thick forest into the Chittoor Taluk, but the climate is very feverish. To this retreat the Zemindars were accustomed to betake themselves in times of trouble. The remains of a few buildings and a temple still exist upon the hill. The temple is regarded with considerable veneration, as the rishi Garkia, who gives his name to the neighbouring stream, is believed still to visit the place, and virtuous men hear the sound of bells and music at midnight as though he were worshipping there. Every Monday many people offer up prayers at the shrine.

Kílapatla is now a small village with a population of 2,800, but it was once noteworthy on account of the celebrated poligar of these parts, Bódikondamma Naidu, who lived here, and the temple built by Bramha rishi, which the people affirm was in the poligar's time esteemed to be as holy as Tirupati. Kondamma Naidu used personally to conduct a most gorgeous annual festival, and because he spent all his revenues on this instead of paying his peshcush, he got into trouble with the Rájah of Chandragiri, who seized him and put him in prison. When the festival approached he begged for one day's leave to conduct the ceremonies, which was denied, but on the feast day morning his cell was found empty, and when the rájah pursued him to Kílapatla he found

him seated on an elephant and heading the procession. The swámi had of course miraculously released his devotee, and the rájah in consequence not only forgave but honoured him in many ways. Kondamma Naidu's name is talked of all over Punganúr and Palmanér, but his descendants now live in Kilapatla in poverty. The temple is in ruins and the festival, though continued, has lost all its importance. Near the village is a famous banyan tree covering a very large area.

Agastéswárakonda is only noteworthy as being a holy place. It is said that when Siva was performing a yágam in the north, so many people flocked to the spot that the earth was about to be upset, when Siva sent Agastayya hither to maintain the balance. He employed his leisure in building the temple on the hill, which is now in bad repair. An annual festival, Sivarátri, is here celebrated, and the place is, like Kálahastri, sometimes called the Southern Benares. Popular opinion asserts that the Suvarnamukki really rises in a deep pool in this hill. This was once proved by a man who dropped into it a lime and a rattan, and then, hurrying off to Kálahastri, recognised them as they floated down the river there.

KANGUNDI ZEMINDARI.

This estate appears to have been long in the possession of the present family. According to a history in their possession, one Kambi Naidu, the son of a petty chieftain who ruled over a small estate near Gooty, called Páyapalle, emigrated to the south in the middle of the eleventh century, and settled at Anganamala or Maharázghúr, on the Salem frontier. The date assigned to this event is certainly far too early, and it may be surmised that Kambi Naidu was one of the Ménkávalgars appointed by the Vijianagar rájahs when they established their power in this neighbourhood. From Anganamala Kambi Naidu removed to Gónagóru, about three miles north of Kuppam, and built a fort there; but this change did not satisfy him, for discovering the strong hill of Kangundi during a hunting expedition, he resolved to establish himself there. With great labour the drúg was constructed, with a flight of steps leading to the summit, and a village was built at the foot of the hill. Here his descendants have ever since resided.

Kambi Naidu is said to have founded many villages and built many tanks. He attacked the neighbouring Poligars of Tumsee, Diggavapáliem, Bétamangalam, Táyellúr, Budigutta, Mélpati, and Jawádi Páliem, and annexing their estates, built the forts of Táyellúr, Budigutta, and Bétamangalam." His grandson Mommidi Chinna Vírappa Naidu was not so successful in war, for on attacking a chief named Subajugadéva Ráyalu his forces were utterly defeated, and he was obliged to cede Mélpati, Anganamala, and Diggavapáliem to the conqueror.

Táta Vírappa Naidu, the fifth poligar, is described as having accompanied Zulfikar Khán and assisted at the siege of Gingee. His valour was rewarded by the restoration of the Diggavapáliem fort and the taluk surrounding it. In the time of the tenth poligar, Ramabudra Naidu, the Mahrattas invaded the country and forced him to relinquish the taluks of Bétamangalam, Táyellúr, and Budigutta as the price of his being left in undisturbed possession of the rest of his estate.

Varamurti Naidu, the fifteenth poligar, appears to have been an ambitious ruler, for he ravaged the districts of Kólár, Uskóta, Báramahál, Ambúr, Sátghur, Bétamangalam, Táyellúr, and Jawádipáliem, and exacted large sums of money from the people. His conduct attracted the attention of Abdúl Nabbas Khán, Nabob of Cuddapah, who resumed Táyellúr and Bétamangalam, and besieged the poligar in Kangundi durgam for three months, after which time he forced him to make terms.

Varamurti Naidu's son, Venkatapati Naidu, attempted to follow his father's example, and seized Bétamangalam once more; but Nazir Jung approaching in 1750, he was obliged to retreat and was subsequently chastised by Abdúl Mozid Khán, the Cuddapah Nabob, for his contumacy. Kangundi drúg was again besieged and reduced after three months, the poligar consenting to pay tribute to Cuddapah.

Vírappa Naidu, the eighteenth poligar, being of an indolent nature, gave the management of the estate to a Brahman minister Chinnayya, with whom at last he quarrelled. The minister appealed to Hyder, who willingly espoused his cause, seized the poligar and his family, and made them prisoners in Seringapatam. Chinnayya then obtained the recognition of the youngest brother, Vírappa Naidu, as poligar since he was a minor, and the second brother Venkatapathi he committed to prison. The minor Venkatagiri Naidu died at Arcot while attending the Mysore army with his spearmen, and was succeeded by Síthappa Naidu, a member of the family, but belonging to a younger branch. The conduct of the Brahmans, who had usurped all power in the estate, naturally caused much disaffection and led to many intrigues. The gurrikas, or chief men in the páliem, obtained the aid of the Fouzdar of Kólár, and marching to Kangundi took possession of the drúg, killed two of the Brahmans, imprisoned a third, and liberated Venkatapathi Naidu, the rightful heir to the estate, who was made poligar. Plots against him were soon formed, and the intriguers killed or deprived of their eyes. Tippu hearing of the poligar's conduct, and probably displeased at the non-payment of peshcush, placed a garrison in Kangundi and expelled Venkatapathi, who sought refuge in the Carnatic. During the third Mysore war he regained possession, but abandoned the management of affairs to an uncle Timma Naidu, who appears to have been his evil genius. After pillaging Kólár and other districts, the Kangundi peons fired upon a party of the Company's troops under Lieutenant Ireton and killed two sepoys, which led to the expulsion of Timma Naidu by Captain Reade, who reported the poligar to be "worse than any other in the

country." For re-entertaining Timma Naidu his fort was in 1792 seized by the Company, and he was called upon to pay a fine of Rupees 20,000 to be divided among the people who had suffered at his hands, on pain of being personally confined. In 1794 he had paid up Rupees 50,000, and liquidated his arrears of peshcush. Shortly afterwards the páliem was handed over to the poligar "on account of his good conduct."

The zemindari is situated in the south-west extremity of the district, and is bounded on the north-west by Mysore; on the north-east by Palmanér; and on the south and south-east by Salem. Its length from north-west to south-east is about 25 miles, and its breadth about 18 miles, while the area of the estate is 342 square miles. It contains a population of only 52,047, of whom 50,565 are Hindus, and the rest Mahommedans.

Most part of Kangundi lies above the ghauts, where the country is undulating and open, with scattered hills. To the south and south-east the ghauts fall towards the plain, and here the aspect of the country becomes rugged, covered with rocky gorges and hills. The Pálár is the only river of any importance, and passes through the estate from north-west to south-east in a rocky bed of no great breadth. It frequently comes down in flood, when, owing to the great fall, its course is very impetuous, and it is for the time impassable.

The Zemindar divides his country into three taluks, the Bailu síma or open country of the north-west, the Chettu síma or wooded country of the middle, and the Kanama kinda síma, which is below the ghauts on the south-east. The forests of the central parts were very valuable as the railway passes through the estate, but they contain little timber now.

There are altogether 319 villages in Kangundi, most of them small. The larger ones, which are mostly found in the northern border, show signs of fortification. The land revenue is about Rupees 80,000, exclusive of what is realized from the forests. Of the land 8,000 acres are said to be under wet crops and 32,000 acres under dry. Nearly 30,000 acres more are probably cultivable but waste, while the rest, 150,000 acres, is uncultivable.

Though an assessment of the land was made in 1805, it was very excessive and has never been acted upon. The Zemindar now leases out his villages to one or more persons jointly for short terms of years, and the lessees make their own arrangements with the ryots, which generally vary from year to year. The assessments of adjoining villages vary enormously in the same year, and this uncertainty regarding the rent, together with the denial of any right to the land on the part of the ryot, has no doubt much to do with the backward condition of the Kangundi people. The well-to-do villagers are generally the lessees, who care little for the poorer ryots. The soil is a poor gravelly loam, which gets more fertile in the north-east parts near the Palmanér Taluk.

The sources of irrigation are chiefly tanks, but particulars are not procurable. The tanks may be described as generally large and excellently built. Wells are infrequent, and spring channels unknown.

Lime, building stones, and iron are the only known mineral products, and the last named is not utilized. It is said that in the Kólár District, on the west of Kangundi, there are 100 square miles of auriferous country, and as the workings are now carried on just beyond the zemindari frontier, it is not impossible that some of the precious metal may be found within the division. Almost the only industry is agriculture. A good deal of jaggery is made and a large factory was lately established at Vijialápuram, which failed. The Kurrubas breed excellent sheep and weave cumblies. Others devote some attention to raising Mysore bullocks, and Kangundi used once to furnish animals for use in the artillery. The fame of the Kangundi cattle is however declining, though large extents of pasture ground, called "kúragam," are still set apart for grazing purposes.

The zemindari possesses the advantage of railway communication with the rest of the Presidency, but has only one station at Kuppam. The road from this place to Venkatagirikóta in Palmanér is practically the only road, for two others from the same place to Kangundi on the one side and Krishnagiri on the other, are in very poor order, having been made during the famine. There is very little of any interest about the division, and its chief places are but insignificant villages.

Kuppam is the largest place, having a population slightly exceeding 2,000. It is a clean, well-to-do village near the railway station, and therefore with a busy bazaar. The Deputy Tahsildar and Sub-Magistrate, who has charge of the division, has his head-quarters here, and a large market is held once a week.

Kangundi was once the chief place in the neighbourhood, but has lately been almost depopulated by fever, cholera, and famine. The Zemindar lives here in his palace, by no means an imposing pile of buildings. The village lies at the foot of a very precipitous hill, which is fortified and must have been a place of great strength, much care having been expended in the fortifications, now greatly dilapidated. The hill is ascended by a flight of steps, which are in bad order. Half way up is a cave filled with the bones and horns of cattle. An old rusty cannon, evidently of native manufacture, still remains in the fort.

Rállabudugúr is a large village on the western border with a population of 800. Its temple, dedicated to Gópálurámaswámi, is curious from its pillars, which are 30 feet high. An annual cattle fair is held in this place, and large numbers of the Mysore breed of bullocks are offered for sale.

Vijialápuram is another large and thriving agricultural village, five miles north of Kangundi. It has some large tanks and two big temples, and exhibits a well-to-do appearance.

Gónagóru, situated on the south-west, though a small village, is regarded as rather a sacred place in these parts. It was originally the head-quarters of the poligars, and traces of their original hill fort still remain.

ARNI JAGHIRE.[1]

This jaghire is bounded on the north by the Vellore Taluk; on the east by Arcot and Wandiwash; and on the south and west by Pólúr. Its area is 183 square miles, and its population 77,284. It was acquired early in the seventeenth century by one Vadaji Bhásker Punt, who accompanied Sháhji in his expedition into the Carnatic, and received the estate in reward for his military services. With but few interruptions the jaghire was held by his successors upon the very favourable condition of paying an annual nuzzer of Rupees 10,000. Added to this are the obligations of suitably supporting members of the family, erecting no fort or stronghold in the country, retaining no military force, and imposing no unauthorised cesses. The present nuzzer amounts to a little more than Rupees 5,000, reductions on account of the relinquished móturfa, &c. having been made.

The estate is for the most part flat and open, without much jungle growth, but there are three tracts of scrub, the largest in the south near the villages of Murugamangalam and Karapúr; another on the north between Sirumilúr and Mullandram in the Arcot border; and the third on the west, by Kastambádi, where some 7,000 acres are covered with low trees fit for fuel. The few hills are of very slight elevation. The highest are those near the villages of Sirumilúr, Púsimalaikuppam, and Puthúr, which are sparsely wooded and kept under strict conservancy. Besides these there are the Dévikápuram hill, having a celebrated temple upon its summit, and the Vannándurgam or dhoby fort.

The Chéyár or Bahudánadi cuts off a small portion of the south-east of the jaghire, but the country is chiefly drained by the Seyár or Kamandalanadi. This river rises in the Jewádis, and descends into the plains near Padavéd in Pólúr, after which place it is often called. Soon after entering Arní it receives the waters of another stream, also springing from the Jewádis, north of Padavéd. The united waters flow past the town of Arní and join the Chéyár just east of the jaghire. There is generally a small flow of water in the sandy bed of the river, and springs are numerous.

The jaghire contains 182 villages, of which 51 have been given away as inám. Its approximate area is 117,000 acres, of which 44,476 acres compose ináms of various kinds, leaving about 62,500 acres as the extent of the áyen ayacut. Of this rather more than a half, or 32,840 acres, bearing an assessment of Rupees 1,46,179, are occupied, while of the inám lands only 13,300, assessed at Rupees 61,678, are under the plough. Of the cultivated áyen lands 18,859 acres are dry, assessed at Rupees

[1] Most of the information regarding this estate has been kindly furnished by the Jaghiredar's secretary.

42,953; 13,834 acres are wet, assessed at Rupees 1,00,733; and 147 acres are garden lands, assessed at Rupees 2,491. The cultivable extent is composed of 13,866 acres of wet, 4,147 acres of dry, and 292 acres of garden lands.

The Jaghiredar's land revenue for a series of years is exhibited in the following statement :—

Fasli.	Wet.	Garden.	Dry.	Total.
	RS.	RS.	RS.	RS.
1281	81,649	1,361	33,605	1,16,636
1282	89,234	1,850	37,743	1,28,828
1283	91,590	1,999	38,712	1,31,703
1284	95,794	2,283	40,201	1,38,279
1285	97,306	2,350	39,905	1,39,562
1286	99,724	2,439	43,082	1,45,246
Average ..	92,550	2,050	38,775	1,33,375

The sources of irrigation are áyen tanks 163, inám tanks 53, áyen river channels 35, inám river channels 8, anicuts 7 (two out of repair), jaghiredar's wells 1,207, private wells 3,600. All these are in very good repair, the Court of Wards, during the present jaghiredar's minority from Fasli 1281 to 1283, having restored many, and the example thus set having been followed by the present proprietor on attaining his majority. Besides the two rivers referred to, there is an extensive flood drain called "maduvu," into which many of the tanks surplus, and across which dams have been built to divert the water into other tanks. This maduvu never fails even in the hottest months.

The principal tanks are those of Kamakúr (acres 713, assessment Rupees 6,434), Thachúr (acres 669, assessment Rupees 5,347), Thirumala-samudram (acres 385, assessment Rupees 3,991), and Panayúr (acres 434, assessment Rupees 3,092). The soil is chiefly sand mixed with red clay, and the assessments are extremely high. There are four classes for wet lands, but in these there are no less than 157 different rates ranging from Rupees 18-6-0 to Rupees 2-2-2 an acre. In the first class alone there are nearly 100 rates, varying from Rupees 18-6-0 to Rupees 3-12-6 per acre; thus the first class wet rate of one village is not the same as that of another, but in every village the second, third, and fourth classes are each three-fourths of the class just above them. The same complication exists in the dry and garden assessments. Of the former there are three classes, containing 72 different rates, the first class running from Rupees 4-4-3 to Rupees 1-10-4, and the lowest rate of the third class being therefore Annas 14-10. There is but one class for garden lands with fifteen rates, varying from Rupees 26-4-0 to Rupees 11-13-0 per acre. Brahmans are everywhere allowed a remission, paying three-quarters of the amount that any other caste would have to pay, and in about twenty-five villages favourable rates have been allowed by various jaghiredars to favourites.

These are known by the names of the original grantors, as Nágojí Row's rate, and so on. The average rates for the whole estate are as high as—

	RS.	A.	P.	
Wet land	7	13	8	per acre.
Dry do.	2	9	7	do.
Garden do.	16	7	8	do.

The assessments were until 1805 paid in kind, but in that year Mr. Ravenshaw, the Collector of South Arcot, managed the estate on behalf of the Court of Wards, surveyed it, and commuted the average grain payments into money rents. Four kalams were considered the equivalent of a rupee in the case of Sudras, and 5, 5½ or 6 kallams in the case of Brahmans. This accounts for the great variety in the assessments. The ordinary ryotwari system now prevails, and the cultivators possess the right of disposing of their lands by sale.

The soil is poor and leaf-manure not generally procurable, so that the outturn cannot be very high.

Having hardly any hills, Arni has hardly any minerals. A little iron sand is found, but is not used.

The principal manufacture is weaving. There are upwards of a thousand looms, distributed among fourteen villages, and producing some 200,000 women's cloths in a year, worth about Rupees 7,50,000. The best fabrics are woven in Arni itself, where they are made of a mixture of silk and cotton, and are much worn by the more wealthy Brahman women. The price of these varies from Rupees 7 to Rupees 50 and many are exported to Mysore. The celebrated Arni muslins are however not made here, but in the Chingleput District, not far from Máderpák. Besides weaving, dyeing of piece-goods and mat-making are carried on. A somewhat superior sort of pottery, glazed and unglazed, is also produced in the jaghire.

The following are the roads in the estate :—

1. Vellore to Wandiwash	18	miles.
2. Arni to Arcot	5	do.
3. Arni to Chétpat	10	do.
4. Arni to Pólúr	13	do.
5. Branch from No. 1 to Pólúr	6	do.
6. Branch from No. 4 to Santhavásal ..	5	do.
Total ..	57	miles.

Arni.—This town is the largest in the jaghire and the head-quarters of a Deputy Collector, Deputy Tahsildar, and a District Munsif. It lies upon the southern bank of the Kamandalanadi, and has two large tanks, one on the east and another on the south. There is nothing particularly interesting in the town, which is an extensive one containing 4,500 inhabitants. The chief or only feature of interest is the fort, a large, almost square structure, which has been much dismantled. Its site, including the glacis, does not belong to the Jaghiredar, and the stones

from the walls have therefore been freely used by the Public Works Department. The zigzag entrance is upon the southern side, but the present approach is through a gap in the fortifications in the east. Until thirty years ago Arni was a military station, and at one time a very large one, as the long lines of deserted barracks testify. The buildings are fast falling into disrepair, but portions are used as the District Munsif's Court, the Deputy Tahsildar's Cutcherry, the D.P.W., and Post Offices, and Taluk School. There are two old European cemeteries near the western walls, much neglected. An imposing monument in the shape of a high column stands on one side of the old parade ground, built, as the inscription shows, by an officer of the garrison in memory of a brother officer whom he shot in a duel. At the north-west angle of the enclosure is a fine old temple, somewhat recalling that in the Vellore fort, though it has no superior sculptures. Not far from the fort walls there is, as at Vellore, a large fresh water tank called the Súriaguntah. The fort is believed to have been built by Ganapathi Ráyalu, brother of Krishna déva Ráyalu, whose name is connected with Vellore.

Sathiavijianagaram.—This town (population 4,000) is so called after the holy Madhva priest Sathiavijiaswámi, who died here, and over whose burial place a mhatt was raised many years ago. The spot is visited by many votaries of the Madhva sect from all parts of the country.

Sathiavijianagaram has continued to be the residence of the Jaghiredars of Arni since 1764, the year in which the fort, which till then had been their residence, was taken possession of by the Nabob of Arcot. The village is a mile and a half to the east of Arni, and on the opposite bank of the river. The Jaghiredar's palace consists of two fine buildings of modern construction, and said to be in the Italian style of architecture. A school was quite recently opened by the Jaghiredar, who supports it, and calls it the 'Buckingham School.'

Dévikapuram, or "the city of the goddess," with a population of 1,500, is principally noteworthy for its temples. The most important of these is dedicated to the goddess Brihathámba, and is situated in the town, while that of her spouse Kannakagiri Íswara crowns the adjacent hill. The former temple was built by the Chóla Rájah Tóndiman Chakravarti, who is said to have begun his mission of temple building at this place. It is regarded as second in importance only to Tiruvannámalai, and attracts to the place a large number of worshippers. The goddess is one of the four brought into existence by Bramha.

Kunnattúr is about five miles from Arni by the side of the road from Vellore. It is only interesting from the fact that it was during the last century a considerable cavalry station. To the north of the road is a large European cemetery, containing a great many old monuments, on none of which, however, are there inscriptions.

CHAPTER V.

POPULATION AND CASTES.

THE earliest record of population found among the district records relates to the year 1822 when the numbers living in the Government taluks alone were reported to be—

——	Males.	Females.	Total.
Above 50 years	67,627	89,251	156,878
Above 15 do.	245,537	218,674	464,211
Under 15 do.	149,246	121,957	271,203
Total ..	462,410	429,882	892,292

Since 1851 quinquennial enumerations of the people have taken place, but the system was defective, the work being entrusted to the village officers in Government taluks, and Zemindars supplying the figures for their estates. The results were as follows:—

Years.	Males.	Females.	Total.
1851	762,715	723,158	1,485,873
1856	811,834	776,270	1,588,104
1861	849,990	804,667	1,654,657
1866	Not stated.		1,787,134

In 1871 the first careful census took place, and a close approximation to the truth was obtained. The results of the enumeration as regards North Arcot are thus given in the Census Report:—

"The population according to the census numbered 2,015,278 and the houses 329,844, which gives an average for the whole district of 6·4 inmates to a house, allowing for 15,744 which were uninhabited. The annexed table shows the various averages of inhabitants in different taluks to the different descriptions of houses. In Vellore Taluk the average of occupants to a terraced building was high, viz., 17·8.

Taluks.	Terraced.	Tiled.	Thatched.	Unknown.	Total.
Chittoor	5·6	5·8	6·0	12·7	6·0
Chandragiri	4·7	4·9	4·5	10·2	4·6
Palmanér	4·6	6·5	4·2	5·3	4·3
Gudiyátam	8·3	6·9	6·6	5·9	6·7
Vellore	17·8	7·3	7·3	10·2	7·4
Wálájá	8·5	6·8	7·9	6·5	7·6
Pólúr	7·8	9·3	8·7	22·5	8·8
Wandiwash	7·5	8·7	8·6	12·3	8·6
Arcot	6·7	7·0	7·9	9·6	7·7
Kalahastri Zemindari ..	4·7	6·2	6·2	8·8	6·2
Kárvétnagar do.	6·8	7·6	6·3	8·5	6·4
Punganúr do.	4·7	6·2	3·5	7·5	3·6
Kangundi do.	7 2	7·0	5·4	10·7	5·5
Arni Jaghire	6·2	7·5	8·3	11·1	8·1
Total ..	5·1	7·2	6·3	9·4	6·4

"In the present population there has been an increase of 12·8 per cent. In some of the taluks the increase will be found very high, as will be observed from the annexed comparative table :—

Taluks.	Population as per Quinquennial Return of 1866-67.	Population according to the Census of 1871.	Increase.	Percentage of Increase.
Chittoor	193,436	213,045	19,609	10·1
Chandragiri	91,275	99,628	8,353	9·1
Palmanér	53,072	60,211	7,139	13·4
Gudiyátam	135,233	162,980	27,747	20·5
Vellore	148,412	179,156	30,744	20·7
Wálájá	191,851	216,204	24,353	12·6
Pólúr	92,974	109,150	16,176	17·3
Wandiwash	133,982	153,507	19,525	14·5
Arcot	141,572	157,391	15,819	11·1
Kalahastri Zemindari ..	122,136	135,104	12,968	10·6
Kárvétnagar do.	258,836	289,894	31,058	11·9
Punganúr do.	102,111	109,282	7,171	7·0
Kangundi do.	47,421	52,047	4,626	9·7
Arni Jaghire	74,823	77,679	2,856	3·8
Total ..	1,787,134	2,015,278	228,144	12·8

"Of the gross population, 1,020,678 were males and 994,600 females, giving a percentage of only 97 women to 100 men. The Hindus numbered 1,913,020 or 94·9 per cent., the Mahommedans 86,741 or 4·3 per cent., and the Christians 7,436 or only 4 per cent. The Jains are returned as a little more in number than the Christians; 192 only are classed as others. The above particulars with regard to each taluk are given below :—

Taluks.	Houses.			Population.										
				Children.		Adults.		Total.						
	Inhabited.	Uninhabited.	Total.	Boys under 12 Years of Age.	Girls under 10 Years of Age.	Males.	Females.	Males.	Females.	Hindus.	Mahommedans.	Christians.	Buddhists and Jains.	Others.	Total.
Chittoor	35,247	1,383	36,630	40,383	35,453	69,205	68,004	109,588	103,457	206,518	6,033	371	4	119	213,045
Chandragiri	21,654	1,857	23,511	18,078	16,023	32,964	32,563	51,042	48,586	96,111	3,459	53	..	5	99,628
Palmanér	13,886	699	14,585	9,699	8,898	21,003	20,611	30,702	29,509	57,037	3,076	41	..	57	60,211
Gudiyátam	24,466	1,397	25,863	32,530	29,100	49,936	51,414	82,466	80,514	147,525	14,627	828	..	..	162,980
Vellore	24,262	1,446	25,708	35,009	31,491	53,980	58,676	88,989	90,167	153,335	23,032	2,789	..	..	179,156
Wálájá	28,262	2,005	30,267	42,071	37,441	66,932	69,760	109,003	107,201	209,068	6,006	1,124	..	6	216,204
Pólúr	12,446	449	12,895	21,555	19,206	33,265	35,124	54,820	54,330	104,625	3,167	522	836	..	109,150
Wandiwash	17,831	612	18,443	30,286	27,747	46,911	48,563	77,197	76,310	145,251	2,856	1,089	4,311	..	153,507
Arcot	20,438	1,185	21,623	30,297	27,576	48,267	51,251	78,564	78,827	147,052	9,022	205	1,112	..	157,391
Kalahastri	21,650	933	22,583	26,326	23,115	42,999	42,664	69,325	65,779	131,588	3,453	63	..	..	135,104
Kárvétnagar	45,126	1,722	46,848	56,118	50,470	92,189	91,117	148,307	141,587	286,133	3,737	19	..	5	289,894
Punganúr	29,884	1,027	30,911	19,212	17,155	36,138	36,777	55,350	53,932	105,046	4,049	187	..	..	109,282
Kangundi	9,355	606	9,961	9,269	8,431	17,009	17,338	26,278	25,769	50,565	1,482	..	..	..	52,047
Arni	9,593	423	10,016	14,662	13,186	24,385	25,446	39,047	38,632	73,166	2,742	145	1,626	..	77,679
Total ..	314,100	15,744	329,844	385,495	345,292	635,183	649,308	1,020,678	994,600	1913,020	86,741	7,436	7,889	192	2,015,278

"Under this heading the Hindus are classed as—

	No. of Persons.	Proportion.
Vishnavaites	1,007,705	52.7
Sivaites	900,935	47·1
Lingayets	2,778	·2
Other Hindus	1,602	·08
Total ..	1,913,020	100

"This shows the Vishnavaites to predominate as regards whole district, but in six of the southern taluks Sivaism is the prevailing cult, as will be seen by the abstract below:—

	Vishnavaites	Sivaites.
Gudiyátam	56,400	90,829
Vellore	55,708	96,536
Wálájá	93,533	115,361
Pólúr	30,732	73,841
Arcot	60,206	86,529
Arni	24,035	49,119

"Of Mahommedans nearly 90 per cent., or 77,874, are of the Soonee Sect, and 3,274, or 4 per cent., are Shias: 82 enrol themselves as Wahabis, and 5,511 are described as others. These people are found in large numbers in Vellore, Gudiyátam, and Arcot, where they are the chief traders. These taluks indeed contain more than half the Mahommedan population of the district, which has increased since 1866 by upwards of twelve thousand.

"The Christians are mostly Romanists, and call for no remark, save that they have increased in number from 5,000 to 7,500 since 1866. Particulars concerning them are here given:—

	Roman Catholics.	Protestants.	Total.
Europeans	70	266	336
Eurasians	247	419	666
Native Christians	5,261	1,055	6,316
Others	75	43	118
Total ..	5,653	1,783	7,436

"The subjoined table shows the proportions of the people under each sect of each religion :—

Taluks.	Hindus.				Mahommedans.				Christians.					
									Europeans and Eurasians.		Natives.		Others.	
	Vishnavaites.	Sivaites.	Lingayets.	Other Hindus.	Soonees.	Shiahs.	Wahabis.	Other Mahommedans.	Roman Catholics.	Protestants.	Roman Catholics.	Protestants.	Roman Catholics.	Protestants.
Chittoor	64·4	35·5	·008	·04	85·3	3·1	..	11·6	36·3	63·7	71·9	28·04	100	..
Chandragiri ..	82·8	17·2	·02	·003	68·7	·2	·2	30·9	..	100	88·9	11·1	..	..
Palmanér ..	58·4	41·3	·2	·08	88·8	3·8	..	7·4	..	..	100	..	..	100
Gudiyátam ..	38·2	61 6	·1	·07	93·8	1·3	·2	4·7	..	100	79·3	20·7	..	..
Vellore	36·3	62·9	·5	·2	90·4	3·3	·009	6·3	41·6	58·4	93·6	6·4	70·2	29·8
Wálájá	44·7	55·2	·08	·004	84·2	9·5	·2	6·04	16·3	83·7	78·3	21·7	..	..
Pólúr	29·3	70·6	·04	·01	84·7	2·3	..	13·0	..	..	56·5	43·5	..	..
Wandiwash ..	50·4	49·2	·08	·3	90·5	7·4	..	2·1	..	..	95·9	4·04	..	..
Arcot	40·9	58·8	·2	·03	95·5	3·3	..	1·1	..	100	51·2	48·8	..	..
Kalahastri Zemindari.	65·6	34·1	·2	·08	95·8	3·2	..	1·0	28·6	71·4	100	..	..	..
Kárvétnagar do...	63·7	36·0	·2	·1	84·3	10·5	·3	4·9	..	100	100	..	..	..
Punganúr do...	70·6	29·2	·06	·1	88·8	7·1	·4	3·7	100	..	78·3	21·7	..	..
Kangundi do...	49·6	50·1	·3	..	97·4	2·6	..	..	..	..	..	..	..	..
Arni Jaghire ..	32·8	67·1	·02	..	96·1	1·3	..	2·6	..	100	42·4	57·6	..	..
Total ..	52·7	47·09	·2	·08	89·8	3·8	·09	6·3	31·6	68·4	83·3	16·7	63·6	36·4

"The Hindus of the district are arranged under the usual caste headings, and the numbers of each Hindu caste are noted in the following abstract :—

Caste.	Males.	Females.	Total.	Proportion of Females to 100 Males.	Percentage to the Hindu Population.
Brahmans (Priests)	27,377	27,617	54,994	100·9	2·9
Kshatriyas (Warriors)	14,022	13,060	27,082	93·1	1·4
Chetties (Traders)	16,585	15,965	32,550	96·3	1·7
Vellálars (Agriculturists)	292,925	284,917	577,842	97·3	30·0
Idaiyars (Shepherds)	74,421	72,326	146,747	97·2	7·6
Kammálan (Artisans)	20,751	20,470	41,221	98·6	2·1
Kanakkan (Writers)	10,292	10,295	20,587	100·3	1·1
Kaikalar (Weavers)	32,218	30,816	63,034	95·6	3·3
Vannian (Cultivators and Labourers)	146,194	143,326	289,520	98·0	15·0
Kusavan (Potters)	8,393	7,826	16,219	93·2	·8
Sátáni (Mixed Castes)	15,106	15,710	30,816	104·0	1·6
Sembadavan (Fishermen)	18,235	17,786	36,021	97·5	1·9
Shánan (Toddy-drawers)	14,894	14,352	29,246	96·4	1·5
Ambattan (Barbers)	11,413	10,927	22,340	95·8	1·2
Vannán (Washermen)	15,991	15,451	31,442	96·6	1·6
Others	68,116	66,542	134,658	97·7	7·0
Pariahs	189,039	183,867	372,906	97·3	19·3
Total ..	975,972	951,253	1,927,225	97·5	100

"The females are mostly in the minority, save amongst the Satanis, whose women are as 104 to 100 men. Among the Brahmans and writers the proportion of the sexes is returned as nearly equal.

"An analysis of this table has been so often made in the other districts that it is of little use to go over such well-trodden ground again. No remark is called for, save to account for the number who are returned as 'other castes' and who amount to 7 per cent. of the Hindus. These are swelled by the inhabitants of 30 villages, clustered on some hills known at the Malailaies, 25 miles distant from the town of Vellore. The Yánádies are also included under this heading. The Vellálars in this district are very numerous, and so are the Vannians and Pariahs. Indeed when these three classes are abstracted, but little more than a third remain to be accounted for.

Caste.	Sivaites.	Vishnavaites.	Lingayets.	Other Hindus.	Christians.	Buddhists and Jains.	Total.	Percentage calculated on the preceding Columns.					
								Sivaites.	Vishnavaites.	Lingayets.	Other Hindus.	Christians.	Buddhists and Jains.
Brahmans ...	27,851	21,747	11	20	1	5,364	54,994	50·6	39·5	·02	·04	·002	9·8
Kshatriyas ...	1,276	25,730	...	2	74	...	27,082	4·7	95·0	...	·007	·3	...
Chetties	13,180	19,361	6	3	...	...	32,550	40·5	59·5	·02	·009	...	...
Vellalars ...	177,687	398,038	606	58	1,249	204	577,842	30·8	68·9	·1	·01	·2	·03
Idaiyars ...	22,366	124,327	31	1	22	...	146,747	15·2	84·7	·02	·0006	·01	...
Kammalan ...	38,134	3,022	46	10	9	...	41,221	92·6	7·3	·1	·02	·02	...
Kanakkan ...	12,745	7,807	26	..	8	1	20,587	61·9	37·9	·1	...	·04	·008
Kaikalar ...	49,851	12,788	388	...	7	...	63,034	79·1	20·3	·6	...	·01	...
Vannian ...	220,192	69,130	156	13	29	...	289,520	76·0	23·9	·05	·005	·01	...
Kusavan ...	12,728	3,400	91	...	...	...	16,219	78·5	21·0	·5	...	...	...
Satani	18,189	9,319	950	18	42	2,298	30,816	59·1	30·2	3·08	·06	·1	7·5
Sembadavan ...	9,962	26,058	...	1	...	...	36,021	27·7	72·3	...	·003	...	...
Shanan	7,038	22,178	...	...	8	22	29,246	24·1	75·8	...	...	·02	·07
Ambattan ...	11,222	11,118	...	...	...	...	22,340	50·2	49·8	...	...	...	...
Vannan	21,721	9,627	37	16	41	...	31,442	69·2	30·6	·1	·05	·1	...
Others	56,893	76,497	273	618	377	...	134,658	42·3	56·8	·2	·4	·3	...
Pariahs	199,900	167,558	157	842	4,449	...	372,906	53·6	44·9	·04	·2	1·2	...
Total ...	900,935	1,007,705	2,778	1,602	6,316	7,889	1,927,225	46·8	52·3	·1	·08	·3	·4

"The Mahommedans, as before stated, number 86,741 and are arranged under the following divisions :—

—	Males.	Females.	Total.
Lubbays	13,148	12,772	25,920
Mapilahs	41	43	84
Arabs	12	8	20
Sheiks	19,776	19,350	39,126
Syuds	5,249	4,961	10,210
Pathans	2,854	2,924	5,778
Moghuls	637	651	1,288
Others	2,323	1,992	4,315
Total ..	44,040	42,701	86,741

"The Lubbays are in larger proportions than in most of the districts hitherto reviewed. Both the Civil and Military Departments of Government in North Arcot are well stocked with Mahommedans.

	No. of Mahommedan Males employed.
Lubbays	7,506
Mapilahs	20
Arabs	6
Sheiks	11,166
Syuds	2,824
Pathans	1,559
Moghuls	331
Other Mahommedans	1,406
Total ..	24,818

"The total male population of this district was 1,020,678, and of these 61·3 per cent. or 622,925 follow some occupation, details of which are given below :—

Major Heading.	Minor Heading.	Numbers.	Total.	Percentage to the Male Population.
Professional ..	Government Service	5,048		·5
	Military	4,181		·4
	Learned Professions	1,730		·2
	Minor do.	11,732		1·2
			22,691	
Domestic ..	Personal Service	31,257		3·1
			31,257	
Commercial ..	Traders	35,615		3·5
	Conveyers	2,468		·2
			38,083	
Agricultural ..	Cultivators	329,765		32·3
			329,765	
Industrial ..	Dress	23,113		2·3
	Food	16,083		1·6
	Metals	6,336		·6
	Construction	5,073		·5
	Books	40		·004
	Household goods	4,846		·5
	Combustibles	705		·1
			56,196	
Indefinite and Non-productive.	Labourers	120,076		11·8
	Property	14,649		1·4
	Unproductive	6,713		·7
	Others	3,495		·4
			144,933	
	Total ..	..	622,925	61·3

"The Government Civil Service is filled chiefly by Vellálars, Mahommedans, and Brahmans. These three classes leave only 1,490 vacancies for all the other castes to fill. In the Military and Police Services the Pariahs take the place of the Brahmans, who, as we have shown, are not a warlike race. Vellálars, Mahommedans, and Pariahs form the bulk of our soldiers and police to the exclusion of all but 875.

"Among the learned and minor professions the Brahmans are the most numerous, next the Writers, and thirdly the Vellálars. These castes absorb 8,772 out of a total of 13,462 so engaged.

"Personal service is performed mostly by Pariahs, Washermen Vellálars, and Barbers, who number respectively 8,126, 6,508, 4,422, and 3,847. A good many Mahommedans, Brahmans, and Fishermen are also servants.

Of the traders more than four-fifths are from the former classes marginally noted, from which it will be seen that commerce is not quite such a close borough in this as in many other districts.

Trade	
Vellálars ..	8,788
Chetties	8,305
Mahommedans	5,849
"Others" (Hindus).	5,307

"Cultivation is followed by 32·3 per cent. of the total males who are employed, two-thirds of whom are Vellálars, Vannians, and Pariahs. Compared to their numbers, however, the Brahmans, Mahommedans, and Kshatriyas are largely engaged in this pursuit.

"Dress is chiefly provided by 15,761 weavers. A good many Mahommedans gain their living in this way probably as tailors.

"The food purveyors are chiefly shepherds and toddy-drawers

"Metals and construction employ the artisans; household goods the potters, who, however, go in for cultivation too in North Arcot. Labourers seem to be composed of nearly all classes of the community, not even excepting the Chetties, who, as a rule, rarely follow so poor and ill paid an occupation.

"More than half the owners of property (7,684) in this district are Vellálars, who here seem specially thriving. Of the Pariahs there are 1,910, while the Brahmans only stand third on the list with 1,215. Of shepherds, who are independent, there are 975. When these four classes are deducted, the holders of property which remain are only 2,865.

"Of the unproductive population, the Sátánis are most numerous, seconded by the Brahmans.

"Instruction has reached 5 per cent. of the gross population, or in all 109,038 souls. It is commonly believed that the Mahommedans are untaught. At any rate it is not so in North Arcot, where the Hindus show up as, comparatively, by far the most ignorant. The Christians are not so well to the front as they should be. The Jains are actually better instructed than the Christians, a fact which is hardly creditable to the latter. The numbers of those who can read and write, in proportion to the total of each section of the people, are given below :—

—	Gross Population.	Number able to read and write.	Proportion
Hindus	1,913,020	98,261	5·1
Mahommedans	86,741	8,357	9·6
Europeans and Eurasians	1,120	557	40·8
Christians	6,316	512	8·1
Buddhists and Jains	7,889	1,270	16·1
Others	192	81	42·2
Total ..	2,015,278	109,038	5·4 "

Language.—Tamil and Telugu are spoken in about equal proportions, the former being the vernacular of the southern and the latter of the northern taluks ; but both are known to the better educated all over the

district. The Pálár may be roughly given as the boundary which separates the two tongues, though the frontier line of Tamil has passed somewhat to the north of the river and seems extending still further northwards. There is, as might be expected, no defined line of separation. Tamil villages are scattered among those of the Telugu people, and those of the latter among the Tamilians. Often in the same villages Telugu and Tamil castes live side by side, and in such cases it is usually found that the higher classes speak Telugu and the lower Tamil. The Mahommedans speak Hindustani among themselves, but most, if not all, know the vernacular of their taluk as well. Some pretend not to do so, but it is in most cases mere affectation. Labbays, as a rule, speak only Tamil, though some are now taking to Hindustani. English is spoken more or less fluently by many of the natives in towns and by a few of the more educated in villages: its knowledge is yearly becoming more extended.

Religion.—The Hindus, who form the great mass of the population, profess the religion of the Védas, but a great proportion of the rural population really worship their Gráma dévata, or guardian spirits of the village as well as evil spirits of the female sex.

The Brahmanical religion is divided into three sects, one of which worships Siva, while two worship Vishnu. The belief of the Sivaites or Smárthas is that the living principle of the universe is God, and the natural universe his external appearance; but beyond the visible form of the deity spirit reigns alone, and a man may, by concentrating his thoughts on the spirit, release his soul from its earthly tenement, and thus obtain salvation by union with the spirit of God. As these ideas are too sublime for general comprehension, symbolism was introduced, and, believing that the material universe was the appearance of God, they divided matter into what they regarded as its five elements—earth, water, light, air, and space, under each of which forms they worshipped the deity in the shape of a lingam. Five principal pagodas now exist dedicated to Siva under one of the supposed elements of matter. One of these, representing air, is at Kalahastri, where a sacred lamp suspended over the lingam sways mysteriously from side to side, though its position is such that no wind can affect it. Earth is represented at Conjeeveram; water at "Jumbu Késavaram" near Trichinopoly; fire at Tiruvannámalai in South Arcot; and space at Chidambaram in the same district.

Unlike the Sivaites, the votaries of Vishnu recognize a personal god, separate and different from the universe itself. They call him Náráyana and make Bramha and Siva subordinate deities, to whom he has delegated the functions of creation and destruction respectively. He lives in Vaikuntam, and, without being absent from thence, can pervade parts of the universe with or without form. Those who entertain this belief are called Mádhvas, and their philosophy, Advaitam. The other sect of Vishnavaites are the Sri Vaishnavas who profess the Vishista Advaitam philosophy or the Advaitam with a difference. They hold a somewhat medium position between the Smártas and Mádhvas, for, though they

acknowledge the superiority of Vishnu, they maintain that the human and divine spirits are in some respects one and the same, the soul of man being subordinate to that of God, who has a separate body but a soul, which includes the whole universe. This sect is divided into the Thengalays and Vadagalays, whose disputes often lead to serious affrays. The outward mark of distinction between the sects appears in the shape of the trident which is marked upon their foreheads. The Vadagalays in making this stop the centre line at the root of the nose, while the Thengalays carry it on for a short distance, thus giving the trident a sort of handle. The dispute regarding these two marks is said to be modern, but there are other and more serious differences in belief and ritual.

Thengalay signifies southern Védas or Prabandhas, which are Tamil hymns regarded by these sectarians as equal in importance to the Védas. Vadagalay, on the other hand, signifies northern Védas, and the followers of this school uphold the sanctity of the Védas proper as superior to that of the Prabandhas. The Vadagalays assert that God's good will may be secured by man's good works; but the Thengalays declare that man can do nothing towards securing the favour of the deity. The Vadagalays maintain that Laksmi, the consort of Vishnu, has the power of conferring salvation; but the Thengalays deny this, and say that she can only recommend man for this happiness. Vadagalays ascribe to her the quality of omnipresence; but their opponents deny the goddess this attribute. Vadagalays say that God pays no attention to sins unconsciously committed; while Thengalays maintain that he is conscious of, and pained by, them, but overlooks them through love for mankind. Finally, the Vadagalays believe that an enlightened man of an inferior caste can only be regarded as good and that his natural degradation can never be removed by reason of his enlightenment; but Thengalays, on the contrary, declare that even an enlightened Sudra may be more holy than an indifferent Brahman. In ritual the following distinctions exist:—Vadagalays ring bells during domestic worship; while Thengalays consider this improper. During the annual ceremonies Vadagalays wash the feet of the officiating Brahman and drink the water used for the purpose; but the Thengalays, with better taste, reject this practice. Thengalays always fast on the eleventh day of the fortnight after the full and new moons, called Yékádasi; whereas the Vadagalays, admitting that the day should be kept as a fast, perform the annual ceremonies of deceased persons and feed Brahmans should the day fall upon the eleventh of the fortnight. The Vadagalay widow shaves her head on her widowhood; but the Thengalay need not necessarily do so. The Vadagalay is most particular about bathing, as he believes that it absolves him from sin; but the Thengalay regards it merely as a cleanly habit.

Smártas, Mádhvas, and Sri Vaishnavas are distinguished from one another by the mark upon their foreheads. Smártas use ashes smeared over the body directly after washing, and sandalwood powder in the form of a spot (boṭṭu), generally before taking meals, horizontal lines

(aḍḍa—gandham) or a semi-circle (udva pundram). The absence of the sandalwood spot in the afternoon indicates either pollution or fasting. Mádhvas employ a kind of earth called gôpi chandanam and make a spot with a horizontal line above it called angâram or akshithalu or a two-pronged trident with a spot in the middle called udvapundram. Sri Vaishnaivas with a white sort of clay (nâmam) form their trident marks, the centre line being coloured red. The two white side lines represent the feet of Vishnu and the red line Laksmi.

Of the Mahommedan religion, little need be said, except that with many professors of the faith there is much ignorance regarding its tenets, and a disposition among the more isolated to take part in the devil-worship of their neighbours. There seems to be no attempt at proselytism among them, but the Wahábís make efforts to draw their co-religionists to their own way of thinking. There are doubtless more Wahábis in the district than 82, the number recorded in the census. Many of the Labbays of Ambúr and throughout the Vellore and Gudiyátam Taluks belong to this sect. Wahábiism has, however, little or no political significance here, being a mere religious movement towards a puritan form of Mahommedanism, and an effort of that creed to resume its iconoclastic character, and to throw off the impurities which have been grafted on it by contact with Hinduism.

The Jains are the next most numerous religionists according to the census, though they have now certainly been exceeded in numbers by the Christians. North Arcot is only second to Canara in the number of its Jains. They maintain that theirs is the original religion of the Aryan race and that Brahmanism is a corrupted form of it. They seem to believe in the existence of a god, though they say that they know nothing about him, and they worship certain deified heroes, whom they call Tírtankaras, or those who have "passed over" the gulf which separates human beings from the godhead. Like the Brahmans, they maintain the doctrine of the metempsychosis, and say that the Tírtankaras only by the purity of their lives obtained exemption from further births and attained to eternal happiness. There are twenty-four of these, of whom they chiefly revere the 1st, 23rd, and 24th, named Adinádan, Parsvanádan, and Mahávíra. The earlier Tírtankáras are believed to have been of prodigious proportions and to have lived fabulously long lives, but the later ones, who are probably historical characters, were of more ordinary stature and longevity. There is an extreme ignorance regarding their religion among most of the followers of this faith, and many do not scruple to visit Hindu shrines when suffering from sickness or anxious for any particular benefit. Like Brahmans, the Jains are idolaters, their idols being always nude male figures similar in appearance to those of the Buddhists. One of their most remarkable peculiarities is their extreme veneration for animal life. On this account they never eat flesh nor will they take food or drink water after twilight, lest by mischance they should swallow some minute insect. They have Védas of their own and

conform generally to the customs of the Brahmans, bathing frequently and reciting Sanskrit prayers the while. They mark their foreheads with two upright marks joined by a horizontal base line and having a spot in the centre, all made of sandalwood powder.

The enumeration of 1871 gave the number of Christians as only 7,436, but they certainly exceed that. One Protestant Mission alone, the American Reformed Church, had upwards of 2,000 converts in 1868, and the Roman Catholics far outnumber all the Protestants put together. The Christian converts are almost all taken from among the outcaste Pariahs, who have in some cases, no doubt, come over rather from policy than from conviction, but the next generation will probably produce more satisfactory specimens. Besides the Roman Catholic and American Missions the Established Church of Scotland has a school at Vellore and a German Mission has broken ground at Tirupati.

Condition.—The material prosperity of the people is undoubtedly progressing, particularly that of the lower orders, though there is still much poverty and debt. In this condition many must always be as long as foolish custom necessitates ruinous expenditure at marriage and other ceremonies. Only fifty years ago Mr. Hutt, the Collector of the district, reported that there were slaves in the Arcot, Tiruvettúr, Kávéripák, and Pólúr Taluks, and to a smaller extent in Wandiwash and Sholinghur, numbering altogether 489 males and 199 females, who were not slaves of the soil but personal slaves. The maximum price paid for one was then Rupees 70, and they were only transferrable by private arrangement, never having been sold by decree of court or for Government arrears of revenue! He forwarded a copy of one deed of sale, in which two boys were sold for two pagodas one rupee and nine fanams, or not so much as half a sovereign. Slavery now is utterly extinct unless the Pariah padiáls (Tel. sédigándu) can in any degree be regarded as slaves. These till the soil for the larger landholders and are paid chiefly in grain with a small money payment and the gift of a few old cloths. For the performance of ceremonies advances are given them upon bonds, and their pecuniary liabilities to their masters are used as a means of preventing desertion. Should it be attempted the employer files a suit against the padiál, drags him before the courts, and finally threatens to cast him into jail if he fails to come to terms. The condition, however, of even these unfortunate creatures is gradually improving, and their emancipation becoming more general.

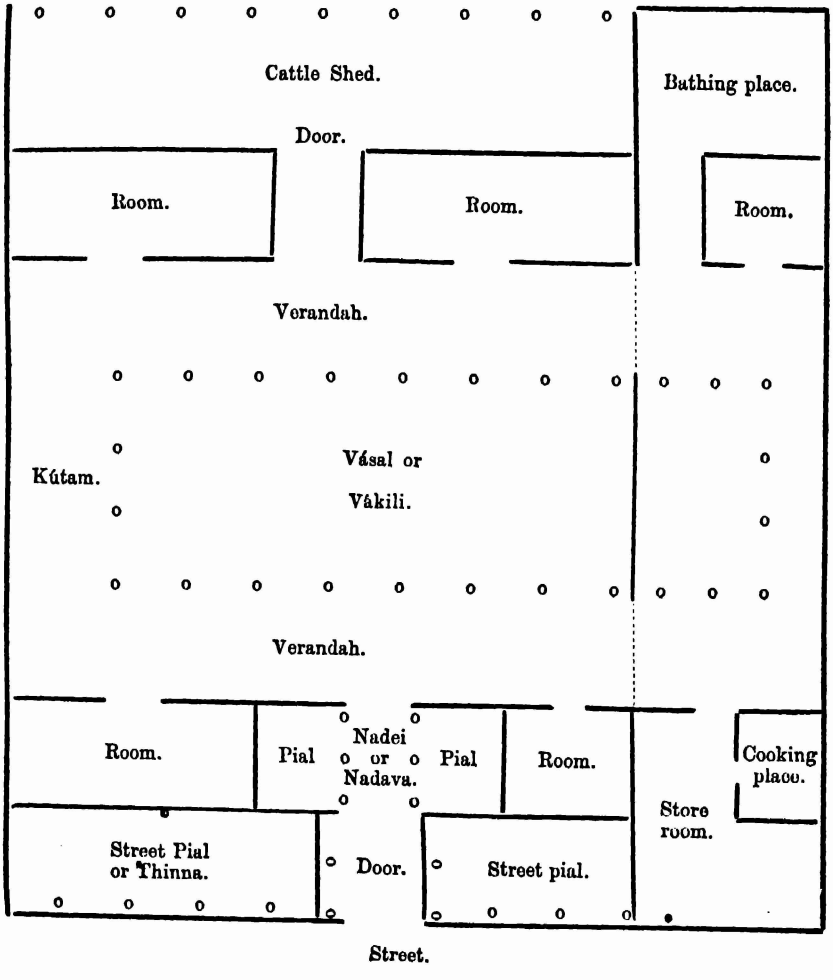
Landholders have probably made greater advances than any other class. The assessments of land have been largely reduced within the last quarter of a century, while the prices of agricultural produce have risen enormously, and agriculturists have, therefore, been doubly benefited. Weavers have perhaps alone of all the people retrograded, their industry having been gradually depressed in consequence of European competition.

Dress.—The ordinary attire of the Hindus consists of a large thin

muslin cloth (dóvati) tied loosely and gracefully at the waist and folded around his limbs as far as below the knees. Over his shoulders is thrown another white or coloured muslin (angavastram) except when he is at home or engaged in labour. His head-dress is composed of a long piece of fine muslin, generally coloured, which, when he can afford it, has a border of gold, increasing in breadth according to his means. The Brahmans, however, who are engaged in priestly offices (Vydíkas) wear no turban, though the Loukíkas, who are employed in worldly duties, do so. The Hindu wears rings of silver upon his toes, anklets and bracelets of gold or silver, and small nose rings, generally of gold, having sometimes gems set in them, but more usually imitation of these. It is in the cost of the turban and the character of his jewels that his wealth shows itself. Some have begun to wear coats and jackets of longcloth or coloured chintz. The very poor are simply clad, and when at work often wear nothing more than a rag assumed for the sake of decency. Mussulmans usually wear long loose trowsers and jackets, besides a turban bound round a skull-cap or fez. The trowsers of the richer are made of brilliantly coloured silk, and their jackets are richly embroidered with tastefully arranged colours. They are less addicted to jewellery than their Hindu neighbours, and do not wear earrings. The Hindus generally shave all the hair of the head, except one lock, while the Mussulmans merely cut their hair in a straight line at the nape of the neck.

The dress of Hindu women consists of a single cloth (Tam. podavei; Telugu chíra) eight yards long folded round the waist over several plaits gathered together in front or either side, according to the custom of various castes, and then drawn over one shoulder so as to cover the bosom. The slightly different style of tying and arranging this cloth generally reveals at a glance to the initiated the caste of the wearer. Below the cloth is worn a petticoat (pávádei) by some castes, unless they are widows. Children of all classes generally have this petticoat alone, and adult women at home if they wear it put off the podavei, and substitute an upper cloth called sella, but this is not considered very respectable, as it is rather the mark of a dancing girl. Some classes wear a small tight-fitting coloured jacket (ravvakei) reaching down about half way to the waist; but widows never wear this, and, like the pávádei, it is thought by some to be improper. A woman who wears the pávádei generally wears the ravvakei, but if she wears the latter it does not follow that she would approve of the former. All Hindu women assume jewels of a more or less costly description according to their position in life, and in wealthy families there are wonderful collections of jewelled ornaments of a stereotyped form, the surplus capital of their husbands and fathers being invested in this way. Mahommedan women invariably, and Mahratta women generally, wear the petticoat and jacket described above. Only the poorer classes of Mussulman females appear in public and are conspicuous for the absence of jewels. The females of the well-to-do are kept strictly or partially gosha, never walking abroad, or only doing so with a cloth covering the head and face.

Houses.—In the larger towns pucka built and even storeyed houses are not uncommon, but the larger proportion of native town houses are built of brick in mud pointed with mortar but roofed with tiles. In villages the people mostly occupy thatched dwellings with brick in mud or mud walls. Above the ghauts many houses are terraced with a tenaceous clay, in which soda is combined, resting upon beams and reepers, open sky-lights or apertures being left in the roof to supply light and ventilation. On the plains such houses are also sometimes seen particularly in Tirupati. The reason for this peculiar style of architecture is variously assigned to high winds, the dread of fire from thatch, and to monkeys. The houses are cosy though close and leaky; the roof cannot be damaged by boisterous winds, and monkeys cannot play tricks with the terrace as they can with thatch or tiles. Terraced houses are, however, much less roomy than the ordinary tiled dwelling of the plains of which the subjoined plan shows the arrangement:—



This represents a large and comfortable house having two kaṭṭus or compartments, that to the left being for general use, while that to the right is used by the women. The street pial or lounge is generally allowed to be occupied by any one. The inner or nadei pial is for friends, as is the kútam or covered hall, where visitors are received and feasts given. The vásal (Tam.) or vákili (Tel.) is open to the sky and lights the whole dwelling, the rooms of which have no windows, or only very small ones. The vásal extends to the second or women's compartment, but a wall divides it, and the covered verandah which surrounds it has generally screens placed behind the open spaces at the ends of the wall to secure the privacy of the women. Many or most houses have no second compartment, and sometimes several brothers occupy various parts of a large building, cooking and messing separately. Each dwelling has a backyard in which cattle are tied, but not unfrequently these are admitted into the interior of the building. The floors are usually of beaten clay daily washed with a mixture of cowdung and water.

The furniture of a well-to-do town resident is of course superior to that of a villager. The former possesses one or more cots of wood or bamboo, a low three-legged table (múkál píta) or two, several boxes, some chairs, and occasionally a press for linen. The wealthy even indulge in sofas, long-armed chairs, mirrors, chandeliers, and wall-shades. In villages the requirements of the people are more simple. They sleep upon mats or wooden planks with low legs (vissa pallaka), and beyond a few benches and boxes they have and need no other furniture. They generally use feeble oil lamps, a wick burning in a brass saucer of oil upon a pedestal, or in small earthenware saucers placed in a niche in the wall. Kerosine lamps are now becoming more used in towns.

Food.—All classes take but two meals a day, one at 10 or 11 A.M. followed by a siesta, and the other at nightfall. The food of the higher castes, except Kshatrias, is entirely vegetable, with the addition of milk and ghee or clarified butter, which is used largely in the preparation of their dishes. Rice is generally the food of the wealthy and is boiled sometimes with only so much water as it will absorb in the cooking, and sometimes with more, so that the residue is strained off and kept as a refreshing drink called conjee. With the rice are eaten dholl, ghee, various vegetable curries, chillies, fresh fruits, sugar, &c. The dholl is first eaten together with a little of the rice; then the server pours over the remainder as much pepper-water as it will absorb; and this is eaten with the curries and other things. A fresh help of rice is then given, and being soaked with butter-milk ends the meal. In the evening, but never in the morning, milk with a few takes the place of butter-milk. The amount of raw-rice necessary for a meal is from half to three quarters of a pound, and with some more.

Most of the Sudra castes take meat, and particularly in the shape of fish, for the evening meal. The meat is taken curried with the rice in the place of dholl.

Fully three-fourths of the population hardly ever touch rice, but eat some one of the cheaper grains, rági, chólum, or kambu. These are ground into flour and, being sometimes mixed with a little broken rice, are boiled into a thick paste (Tam. kali; Tel. sankati) or into a stiffish gruel (Tam. kúlu; Tel. ambili). The former is made into large balls and eaten with soup of salt fish or dholl, mango and other pickles being added as a relish, and butter-milk being drunk with it. In chilly, damp weather the flour instead of being made into paste or gruel is almost always for the evening meal baked into cakes. A hardworking adult man in good times is able to take 2 or 2½ lbs. of dry grain per diem. Cakes of various grains are also eaten on special occasions. The most common kinds are called in Tamil dósai, appam, póli, vadei, amavadei, sómási, paddarpeni, púri, laddu, jillebi, attirassam, &c. These are not ordinarily taken except at feasts, and are then eaten with the rice between the pepper-water and butter-milk courses. The dósai is made of rice and black gram soaked in water and allowed to ferment for a day or two, and then baked into flat cakes. Brahmans eat these in fasting days when they may not sit down to a regular meal. Appams are much the same as dósais, but toddy and cocoanut milk are added, and so Brahmans will not touch them. The vadei is formed of black gram roughly ground, soaked in water with salt, pepper, chillies, and saffron and baked before fermentation. Amavadei is much the same, but cooked with butter-milk. Póli, sómási, and paddarpéni are cakes in which wheat is the chief ingredient.

Divisions.—The caste classification adopted in the census of 1871 contained only seventeen divisions; but there are in North Arcot nearly a hundred different castes each containing numerous sub-divisions, and most of them differing from one another in traditions. None of them are peculiar to North Arcot, but some particulars of them may not be out of place, and in their customs they may probably be found not to be identical with those of other districts.

Brahmans.—This caste numbers about 46,000 in North Arcot or 2·3 per cent. of the population. One-third of the whole number were returned as proprietors of land at the last census, the rest employ themselves as priests, writers, accountants, merchants, &c., while not a few subsist by begging. Many of the prejudices of the caste are disappearing, and it is not now an unknown thing to see a Brahman guiding a plough with his own hands, or serving as a porter upon the railway. Few of them are in affluent circumstances, but most are fairly well off.

Almost all of the North Arcot Brahmans are Drávidas, but a few Gouras from Northern India are found in Tirupati and other large towns. Of the Drávidas only the Ándra, Mahratta, Kárnática, and Drávidi divisions are represented. They may eat together, but never intermarry. Each division contains numerous sub-divisions, the chief of which are the following:—

Smártas.

Velanadu	Speak Telugu.
Murrikínádu	
Drávidi	Speak Tamil.
Kóna Síma Drávidi ..	
Puddúr Drávidi ..	Speak Tamil mixed with Telugu.
Níyógi	Speak Telugu, and are very good accountants. For some reason they are often called Rázus.
Smárta Désashta ..	Speak Mahratta.
Baddagaváti Kannadi ..	Speak Canarese. They are chiefly found in Chittoor where most are money-lenders.
Pradama Sáka	Speak Telugu, and are much looked down upon by all other Brahmans, who say that they are Pariahs at midday. They are, therefore, never visited except in the early morning or after sunset.
Aravattu Vakkalu, or the "Sixty Families."	Speak Canarese. Some of them are also Vaishnavaites.
Gurrukal	Speak Tamil. They are generally priests and thought to be an inferior class.
Bhattar	Speak Tamil and Telugu, and are looked down upon. A strict Brahman will refuse to eat with them.

Vaishnavas.

Bhattacháry	Speak Telugu and Tamil, and are invariably vaidíkars or priests.
Chakravartiár	Speak Telugu and Tamil.
Nambi	Speak Telugu and Tamil; are generally priests, and like the Smárta Gurrukals considered of inferior position.
Ándra Vaishnava ..	Speak Telugu.
Tirumalayár	Speak Tamil. They are mostly priests at Tirupati, from which circumstance they get their name. Originally they were, they say, Sivaites.

Mádhvas.

Mádhva Désashta ..	Speak Canarese and Mahratta.
Mádhva Achári ..	Speak Mahratta and generally priests.
Gólkonda Vyápuri ..	Speak Telugu.

Mahratta Brahmans are numerous in the district and are cunning in accounts as in every thing else. They have secured a large share in the civil administration of the country, and take the place of the Curnam caste in villages above the ghauts. So numerous were they in the public service that the vernacular official language of the district continued to be Mahratta until 1854 The Drávidis proper form the bulk of the

Brahman population of North Arcot, and are most numerous in the taluks south of the Pálár, where they were allowed a remission of ten per cent. in their assessments until some twenty years ago.

Though not so particular as they used to be in adhering to the strict observance of their caste rules, disgraceful irregularities, such as indulgence in liquor, flesh-eating, and the like, are said to be unknown except among Brahmans who hail from Tanjore, Kumbakónum, or Madras.

Jain.—Of this caste there are nearly 8,000 in the district, more than half of whom are found in the Wandiwash Taluk, and the rest in Arcot and Pólúr. Their existence in this neighbourhood is accounted for by the fact that a Jain dynasty reigned for many years in Conjeeveram. They must at one time have been very numerous, as their temples and sculptures are found in very many places from which they themselves have now disappeared. Some particulars of their religious belief have already been given. They have most of the Brahman ceremonies and wear the sacred thread, but look down upon Brahmans as degenerate followers of an originally pure faith. For this reason they object generally to accepting ghee or jaggery, &c., from any but those of their own caste. Their priests are styled Vádiárs, but seem not to do much in the way of instructing the laity, who know but little about the tenets of their religion. They do not admit that they have any sub-divisions among themselves, apparently considering that they are all pure Brahmans. Like these they are defiled by entering a pariah village, and have to purify themselves by bathing and assuming a new thread. Theoretically their daughters should be married in childhood, but practically the rule is not observed. The usual caste affix is Nainár, but a few, generally strangers from other districts, are called Row, Chetty, Dás or Mudeliár. All these may intermarry and associate freely with one another, but no Jain will take food with any other caste man.

Rázu.—The Rázus are the most numerous class of those who claim to be Kshatrias in North Arcot. They are found almost entirely in the Kárvétnagar estate, the zemindar being the head of the caste. As a class they are the handsomest and best-developed men in the country, and differ so much in feature and build from other Hindus that they may usually be distinguished at a glance. They seem to have entirely abandoned the military inclinations of their ancestors, never enlist in the native army, and almost wholly occupy themselves in agriculture. Their vernacular is Telugu since they are immigrants from the Northern Sircars, from whence most of them followed the ancestors of the Kárvétnagar Zemindar within the last two centuries. In religion they are mostly Vaishnavites, though a few follow Siva, and the worship of village deities forms a part of the belief of all. Their peculiar goddess is called Nimishámba, who would seem to represent Párvati. She is so called because in an instant (nimisham) she once appeared at the prayer of certain rishis and destroyed some rákshasas or giants who were persecuting them.

Claiming to be Kshatrias, the Rázus of course assume the sacred thread and are very proud and particular in their conduct, though flesh-eating is allowed. In all the more well-to-do families the women are kept strictly gosha.

Rájputs.—There are but few of this caste in the district and they chiefly reside in Vellore; a few families are also found in Chittoor and Tirupati. They assert that they are true Kshatrias who came from Rájputana with the Mahommedan armies, and they, more than any other claimants to a Kshatria descent, have maintained their fondness for military service. Almost all are sepoys or military pensioners. Their names always end with Singh, and in many of their customs they resemble the Mahommedans, speaking Hindustani and invariably keeping their wives gosha. They are often erroneously spoken of by the people as Bondilis, a term which is applicable only to the Vysia and Sudra immigrants from Northern India; but doubtless many of these lower classes have taken the title Singh and called themselves Rájputs. Members of the caste are, therefore, very suspicious of strangers professing to be Rájputs. Their cooking apartment, called chowka, is kept most religiously private, and a line is drawn around it beyond which none but members of the family itself may pass. At marriages and other feasts, for the same reason, cooked food is never offered to the guests, but raw grain is distributed, which each cooks in a separate and private place.

Rájputs have an abhorrence of the flesh of the fowl, as strong as that of the Mahommedan of the pig, as they consider the bird to be a filthy feeder. They differ from other Hindus in some of their customs: for instance, their marriage pandals or booths must be made with mango posts and not with those of the *Ficus religiosa*, and the bride and bridegroom must walk round it seven times, a ceremony which does not exist among other castes.

TRADERS.

Kómati.—The members of this caste wear the sacred thread and profess to be of pure Vysia descent, a claim which is by no means admitted by other Hindus. They live entirely by trade, in which they are eminently successful, and are among the most wealthy men in the district; but they enjoy an unenviable notoriety for sharp practice and fraud, and are doubtless cunning, over-reaching, and unscrupulous in their business. The meaning of the name has been variously explained to be "cow-minded," *i.e.*, quiet (go-mathi), "fox minded" (ko-mathi), and "cow-gored" (go-mutti), but the last is the most popular explanation. The story accounting for it is not fit for publication, but it asserts that Kómatis are the descendants of a Brahman woman by a chuckler or

cobbler. It is a fact, though many Kómatis deny it, that at their marriage ceremonies they have to present betel-nut and leaf to some chuckler family, and this custom goes to confirm to some extent the imputation cast upon their descent. They are proverbially timid and cowardly. A Telugu proverb says, "Kómati piriki kóṭṭité uriki" (if you strike a Kómati coward, he always runs away), and one name for the caste is Donniála Játi or coriander-seed caste, because the coriander before being sown is always rubbed hard with an old shoe, and the idea is that a Kómati should always be thus roughly treated in order that his natural timidity may keep in check his desire to over-reach.

The caste contains many gótrams which are divided into Smárthas and Vaishnavas. Intermarriage and eating together is allowed, but no Kómati will eat with any other caste. Telugu is their vernacular; girls are always married during childhood; widow marriage is forbidden, as are flesh-eating and spirit-drinking. In keeping to these rules they are very particular, and they have a strong caste-sympathy with one another which leads to none of them ever coming to want. Should a Kómati fail, his caste men raise a subscription and start him in life again.

The sacred volume of the caste is called the Kannika Puránam, which accounts for the chief object of their worship—a goddess named Kannika Paraméswari. She, it appears, was a handsome Vysia or Kómati maiden whose beauty attracted the ruler of her country, who desired to receive her in marriage, but was refused. When he contemplated force the young girl resolved to commit suicide, and calling her people together enjoined them to revere and worship her as a deity, and then threw herself upon a kindled pyre. She is now worshipped by the whole caste who perform annual ceremonies in her honour.

One of the peculiar customs among Kómatis is that which renders it the duty of a man to marry his uncle's daughter, however sickly and deformed she may be. Polygamy, however, is allowed practically in any case.

Béri Chetty.—This caste, though disparaging stories are not told of it, appears in many respects similar to that of the Kómatis, but its members will not admit that the latter are on a par with them, and declare that they alone represent the true Vysia stock. On this account they call themselves Béri Chetty or the principal merchants. They have a legend, somewhat resembling that of the Kómatis, which states that Káveripuram, near Kumbakónum, was formerly the town in which the caste principally resided. The king of the country attempted to obtain a Béri Chetty maiden in marriage, but was refused, and he therefore persecuted them and drove them out of his dominions, forbidding interchange of meals between them and any other caste whatever—a prohibition which is still in force.

The caste bases its claim to a true Vysia descent upon the following grounds:—In the time of the Chólas they erected a water-pandal and Kómatis claimed the right to use it, which was at once denied. The

king attempted to solve the question by reference to inscriptions in the Kamákshiamma temple in Conjeeveram, but without success. He then proposed that the rivals should submit to the ordeal of carrying water in an unbaked pot. This was agreed to, and the Béri Chetties were alone successful. The penalty for failure was a fine of Rupees 12,000, which the Kómaties could not pay, and they were therefore obliged to enslave themselves to a Béri Chetty woman who paid the fine. Their descendants still are marked men, who depend upon Béri Chetties for their subsistence; the great body of the Kómatis in the country were not parties to the agreement, and they do not now admit that their inferiority has ever been proved.

The caste is divided into six classes:—Telugu, Acherivák, Kanadi, Vada Muguttur, Nágara, and Musaravák; but all these may freely intermarry. Some worship Siva and some Vishnu, and a few are Lingavites who do not marry into families with a different worship. They bury, while the others burn, their dead. All the divisions wear the sacred thread and do not tolerate widow remarriage. Unlike Kómatis, their daughters are sometimes married after puberty.

Vánia.—The word vánik signifies trade, and trade in oil, as well as its manufacture, is the usual employment of this caste, who assert that they are Vysias, and claim the Vysiapuránam as their holy book. They are said to have assumed the thread only within the last fifty or sixty years, and are reputed to be the result of a yágam performed by a saint called Vakkuna Mahárishi. The caste contains four sub-divisions called Kámákshiamma, Visálakshiamma, Atchutáli, and Toppatháli, the two first referring to the goddesses principally worshipped by each, and the two last to the peculiar kinds of tális, or marriage tokens, worn by their women. They have the same customs as the Béri Chetties, but are not particular in observing the rule which forbids the eating of flesh.

A bastard branch of the Vánias is called the Pilla kútam, which is said to have sprung from the concubine of a Vánian who lived many years ago. The members of this class are never found except where Vánias live, and are supposed to have a right to be fed and clothed by them. Should this be refused, they utter the most terrible curses, and in this manner eventually intimidate the uncharitable into giving them alms.

Gándla.—The name is derived from the Telugu gániga, an oil mill; the caste closely resembles the Vánias, except that they speak Telugu instead of Tamil, and use but one bullock to work the mill, while Vánias use two. They are, therefore, usually known as "Wonteḍḍu Gándlas." The Vánias look down upon them and assert that they are impure Vysias.

Linga Balija.—This appears rather to be the name of the followers of a religious faith than of a distinct caste; for, the Linga Balijas state that their caste contains eleven sub-divisions, each with a separate occupation, viz., Jangam (priests), Reddi (cultivators), Gándla (oil-mongers), and the like. It was apparently a mixed caste started by

Basava, the founder of the Lingayet religion, who is described as the son-in-law of the prime minister of the Rajah of Kalliánapuripatnam in Canara. As it is not unusual for Hindus of mixed descent to claim the title Balija, the name seems to have been applied to the new mixed caste with the prefix of the name of the object of their worship.

Almost all the Linga Balijas of North Arcot are traders, who speak Canarese and are immigrants from Mysore, in which province their gurus live, and whither they still refer their caste disputes. At one time they enjoyed much importance in this district, particularly in its large trading towns. Headmen among them, styled Chetties, were by the Arcot Nabobs assigned districts in which they possessed both magisterial and civil authority, and levied taxes from other merchants for their own personal use. They carried on very extensive trade with Mysore and the Ceded Districts, and are said to have had enormous warehouses which they enclosed and fortified. Breaches of the peace are also described as not infrequent, resulting from the interference of one Linga Balija Chetty with matters relating to the district of another. Their authority has long since disappeared, and is only a matter of tradition. Every Linga Balija wears a Siva lingam usually encased in a silver casket and suspended from the neck; but the very poor place theirs in a cloth, and sometimes tie it to their arm. It is a strict rule that one should be tied to a child's neck on the day of its birth, or on the third day after; otherwise it is not entitled to be classed as a Linga Balija. The Siva lingam worn by these people differs from the Búta or Préta lingams used by Pandárams, Kykalas, or others, who profess the Lingavite faith. They acknowledge two puránáms called, respectively, the Siva and Basava puranáms, and differ in very many respects from other Hindus. They bury and do not burn their dead, and do not recognize the five kinds of pollution, or súthakam, resulting from a birth, a death, spittle, &c., and they do not, therefore, bathe in order to remove such pollution. Widow remarriage is allowed even where the widow has children, but these are handed over to the relatives of her first husband. To widow remarriages no women who are not widows are admitted, and similarly when a maiden is married all widows are excluded. Unlike most Hindus Linga Balijas shave off the whole of the hair of their heads, without leaving the usual lock at the back. They deny the metempsychosis and believe that after death the soul is united with the divine spirit. They are particular in some of their customs, disallowing liquor and flesh-eating, and invariably eating privately where none can see them. They decline even to eat in the house of a Brahman.

Janapa.—This is a caste which engages in trade by hawking goods about the towns and villages of the district. Originally they were merely manufacturers of gunny bags out of hemp (janapa) and so obtained their name, but now they are met with as Dásaris, or religious beggars, sweetmeat-sellers, and hawkers of English cloths and other goods. By the time they have attained to the last honourable profession, they assume to

be Balijas. Telugu is their vernacular, and Chetty their usual caste name. According to their own tradition they sprung from a yágam made by Bramha, and their remote ancestor thus produced was, they say, asked by the merchants of the country to invent some means for carrying about their wares. He obtained some seeds from the ashes of Bramha's yágam, which he sowed, and the plant which sprung was the country hemp which he manufactured into a gunny bag.

The Janapa Chetties are enterprising men in their way, and are much employed at the fairs of Gudiyátam and other places as cattle-brokers.

ACCOUNTANTS.

Kurnum or Kannakkapillei.—This is a Tamil caste which is unusually numerous in this district, numbering upwards of 20,000 persons in 1871. It is found also in Ganjam, Chingleput, and South Arcot, but not to any extent in any other district. The name is derived from the Tamil word for an account (kannaku), and they style themselves Pillei as they claim to be the sons of Bramha: Others, however, maintain that they are the offspring of a Sudra woman by a Vysia. Their own history is contained in a poetical composition called the Sírkariwar, said to have been written in the times of the Chólas. According to this, Bramha, the creator, was, in consequence of the curse of a certain rishi, born as a man at Wodnápuram near Benares. He there had sixty-four sons, all of whom were highly educated in mathematics, and subsequently produced by him before a Chóla King at Conjeeveram, who appointed them his accountants and gave each a merási, the particulars of each being recorded on the walls of the Kamákshiamma temple of Conjeeveram.

The caste is said to have four divisions—Sír, Saraṭṭu, Kei kaṭṭi, and Sólia; the two last of which are not represented in this district. The Sír Kurnums are considered of highest rank and are generally the most intelligent accountants, though they are sadly deficient when compared with the Brahmans who perform their duty of keeping the village accounts above the ghauts. The Kei kaṭṭi Kurnams derive their name from a peculiar custom existing among them by which a daughter-in-law is never allowed to speak to her mother-in-law except by signs: the reason may perhaps be surmised. The members of the four divisions cannot intermarry.

In their customs the caste is somewhat particular. They wear the thread, disallow liquor-drinking, flesh-eating, and widow remarriage, and will eat in the house of no other caste except Brahmans. Most of them worship Siva, but there are some who are Vaishnavites, and a very few are Lingavites.

ARTIFICERS.

Kammála, Tamil; *Kamsala*, Telugu.—The members of this caste are returned as 41,221 in number, being 2·1 per cent. of the population, and are the chief handicraftsmen of the country. Several persons not of this caste have learned their trades of late.

The caste is alleged by the Kammálas to have sprung from Pancha Mukha Bramha, or Bramha with five faces. This deity had five consorts, from whom were descended the five classes into which the Kammálas are divided, each engaged in a different trade, viz., the blacksmiths, carpenters, braziers, stone-masons and goldsmiths. Their traditions state that they originally came from the north of India, where they possessed the magic power of creation and lived in a strong fort called Kánthakóta. Their power and prosperity eventually excited the jealousy of the reigning power, and they were expelled, seeking refuge in Southern India, all the noble architecture of which was produced by them. Proud of their achievements the Kammálas pretend to a superiority even over the Brahmans, and have priests from among themselves, who claim an independent access to the Védas. They also assert that they are the originators of grammar, logic, mathematics, and theology, and therefore style themselves Ácháry or religious instructors. A few are called Bhattar. All wear the sacred thread and refuse to eat with others, even with Brahmans. Widow-marriage is prohibited strictly and flesh-eating nominally. The Brahmans and Kammálas appear from time immemorial to have been rivals. The former say that Visvakarma, the son of Brahma, from whom they assert that all Kammálas are descended, was condemned to become a Chandála or outcaste, and that his progeny are therefore the lowest of the low. The Kammálas retort that Visva Sátha Brahma, the progenitor of the priestly class, was also cursed and turned into a Chandála, and that therefore they are not only as good as Brahmans, but a good deal better, since they still act the part of the deity in ministering to the wants of all mankind. The Brahmans depend upon them for their temples and idols, the Kshatrias for their weapons of war, the Vysias for their balances and other implements of trade, and the Sudras for their instruments of husbandry; in fact none are independent of their aid. The wordy warfare of this kind often waxes hot and fierce, but by most the artisans are placed far lower in the social scale than the Brahmans.

In the knowledge of their trades, except carpentry, the artisans have evidently retrograded greatly, especially in the ornamental working of stone, in which by disuse they have now little skill.[1]

[1] A curious tradition is reported from the Chittoor Taluk that the Chinese were the original artisans of India and taught the Kammálas their trade.

Jínigar.—There are a few members of this caste, chiefly in the Chandragiri Taluk, whose ordinary occupation it now is to paint pictures. They were however once, it is said, artificers, and the account given of them is as follows. They were originally Rázus from the Northern Circars, who, coming to the Chandragiri Rájah for employment, were set to watch members of the Kammála caste who served the rájah, in order to prevent idleness or fraud. After some time the Kammálas finished an idol's car, and, being inflated with pride, demanded to be allowed to sit in it before the swámi was himself placed there. For their arrogance they were expelled, and the Rázus having by observation learned something of their craft, discharged their duties to the community. Under the nabobs they abandoned this walk in life and took to saddlery, whence came their name, from *jini*, a saddle, and now they are merely muchees.

WEAVING CASTES.

Kykala.—This forms the principal weaving class in the district, numbering about 40,000 members, producing large quantities of the male and female cotton cloths ordinarily worn by the people. The name is believed to be derived from "Keikullavar," or people who are under the hand or subordinate, and was acquired thus. The people of the earth being harassed by certain demons, sent a deputation to Siva invoking his assistance. When they arrived Siva was surprised talking with Párvati, who hastily retired, and in doing so dropped nine beads from her anklets. Ascertaining the object of the mission, Siva converted the beads into as many females, each of whom bore him a son. The nine heroes placed themselves under the orders of Siva's son Subramania-swámi and effected the destruction of the demons, after which, by command of their leader, they accepted weaving as their occupation and became the progenitors of the caste.

The Kykalars say that they were first brought into Tóndimandalam by Adóndai, who placed them in charge of the various temples that he built in the country. Until quite recently it was the custom that the eldest daughter of a family should be presented to some temple as a dancing girl or "dási," but this is now rare, since fear of prosecution under the Penal Code restrains them. It is said that where the head of a house dies leaving only female issue, one of the girls is made a dási in order to allow of her working like a man at the loom, for no woman not dedicated in this manner may do so.

The Kykalars are usually called Mudely and worship Siva, some being Lingavites. Tamil is their vernacular, and Brahmans are their priests. Lingavites bury, and the others all burn, their dead. Widows

are allowed to remarry if they have no issue, but not otherwise, and if the popular idea that a Kykala woman is never barren be true, this must seldom take place. Flesh-eating is only nominally prohibited, and in their customs generally they are very free and easy. They may eat in the houses of Brahmans and Kómatis, but not in those of any other castes. They acknowledge the authority of a headman or Mahanáttan, who resides in Conjeeveram but itinerates among their villages, receiving presents and settling caste disputes. Where his decision is not accepted without demur, he imposes upon the refractory weavers the expense of a curious ceremony, in which the planting of a bamboo post forms part. From the top of this the Mahanáttan pronounces his decision, which must now be acquiesced in on pain of excommunication.

Sália.—This is a Telugu caste of weavers attached to the worship of Vishnu. They wear the sacred thread, but appear to possess no tradition, fabulous or otherwise, regarding their origin. They do not allow the remarriage of widows, but permit flesh eating and are not particular in whose house they take their meals. They are divided into Páka Sálays and Padma Sálays, the members of which never intermarry.

Sénia is another Telugu weaving caste, which however worships Siva, usually under the Lingavite form of worship. The Lingavites resemble the Linga Balijas in their customs in all respects, except that they recognize súthakam, or pollution, and bathe to remove it. They have no sub-divisions among themselves, and freely eat in the houses of all Linga Balijas, but the latter will not eat with them. They entirely disregard the spiritual authority of the Brahmans, recognizing priests among the Linga Balijas, Jangams, or Pandárams. In the exercise of their trade they are distinguished from the Kykalars in that they sometimes weave in silk, which the Kykalars never do.

Jándras.—This is also a Telugu-speaking caste of weavers, which however acknowledges Siva as its object of worship. The Jándras principally worship a female deity called Chowdéshwari, who is regarded as the personification of the power of Siva, and as superior in power to all other gods, including the Hindu triad. The caste is most numerous in the Máderpák Division, where it is often called by the name Dévankulam. They are not particular regarding eating in the houses of any respectable Sudra caste.

Patnúlkár.—This is a foreign race of weavers, hailing from Surat and speaking Guzeráti, often called here the Patnúl language. They say that they were originally Brahmans, living in a town of Surat called Dévagiri, in which twelve streets were entirely peopled by them. For some reason, of which they profess themselves to be ignorant, the residents of one of these streets were excommunicated by the rest of the caste and expelled. They travelled southwards and settled in Tirupati, Arni, and Vellore, as well as in Trichinopoly, Tanjore, Madura, and other large towns, where they carried on their trade of silk-weaving (pat-núl = silk thread), whence their name. Another story is to the effect

that they were bound to produce a certain number of silken cloths at each Dípávali feast in Dévagiri for the goddess Laksmi. One year their supply fell short, and they were cursed by the goddess, who decreed that they should no longer be regarded as Brahmans. They however still claim to be such, and follow the customs of that caste, though they refuse to eat with them. They acknowledge priests from among themselves, as well as from among Brahmans, and profess to look down upon all other castes. In religion they are divided into Smártas, Vaishnavas, and Vyápáris, some among the Smártas being Lingavites. In appearance they are lighter complexioned than the southern castes, and are usually in well-to-do circumstances, though ordinarily illiterate. Those who can write employ the Telugu characters in writing their language.

Rangári.—This is a caste of dyers, chiefly found in Wálájápet. They claim to be Kshatrias, who accompanied Ráma in his conquest of Ceylon, from which fact one of their names, Langaries (lanka, the island, *i.e.*, Ceylon), is said to be derived. Ráma for some reason or other became incensed against and persecuted them. Most were destroyed, but a respectable Kshatria lady saved her two sons by taking off their sacred threads and causing one to pretend that he was a tailor sowing, and the other that he was a dyer, colouring his thread with the red betel-nut and leaf, which she hurriedly supplied out of her mouth. The boys became the progenitors of the caste, the members of which now wear the thread. The descendants of the one brother are tailors and of the other, the most numerous, dyers. Their chief feasts are the Dassara and Kámani, the former celebrated in honour of the goddess Tolasi and the latter of Manmada, the Indian Cupid, fabled to have been destroyed by the flame of Siva's third eye. During the Kámani feast fires of combustible materials are lighted, round which the votaries gather, and, beating their mouths, exclaim "laba, laba," lamenting the death of Cupid. In this feast Rájputs, Mahrattas, Bondilis, and Guzerátis also join. The Rangáris speak Mahratta, which they write in the northern character, and name Púna and Shólapore as the places in which they originally resided. In appearance they do not at all resemble the other claimants to Kshatria descent, the Rázus and Rájputs, being poorly developed and by no means handsome. Widow-remarriage is permitted where children have not been born, but remarried widows are prohibited from taking part in religious ceremonies, which seems a sign that the concession has been reluctantly permitted. In most of their customs they conform to those of the Rázus, eating meat and drinking spirits, but not keeping their women gosha.

Dudékala.—These are Mahommedans who have taken to the trade of cotton-cleaning, as their name implies (*dude* = cotton, and *ékuta* = to clean). Similarly by the Tamils they are called Panjáris, which has the same significance. Though Mahommedans, they have adopted much of the customs of the Hindus around them, tying a táli to the bride at marriage, being very ignorant of the Mahommedan religion, and even

joining in Hindu worship as far as allowable. In dress they resemble the Hindus, and often shave off the beard, but do not leave a single lock of hair upon the head as most Hindus do. They were originally Shéyks, but, though their names are Mahommedan, they drop the name of Shéyk for males and Bee for females. In large towns their manners approach more closely to those of the Mahommedans.

CULTIVATING CASTES.

Balija.—The name is derived from the Sanskrit words *bali*, a sacrifice, and *ja*, born, signifying that the Balijas owe their origin to the performance of a yágam. Their legend describes how one Dátchayam, daughter of a saint named Dátchaprajapathi, dissatisfied with the ornaments bestowed upon her by her father, desired more. Her father consulted Bramha as to how he might satisfy her, and the young woman was by the deity directed to perform a yágam. With the assistance of a Brahman she did this, and from the sacrificial flames issued a personage bearing glass bangles, turmeric, and other auspicious articles, which he bestowed upon the girl. She accepted and wore them, directing that all women for the future should use similar ornaments. The person who sprung from the yágam became the ancestor of the Balijas, who are sometimes called Gouriputras, or sons of a woman, since their remote ancestor was the result of a woman's yágam. Originally the caste would seem to have been solely employed in making bangles, pearl or coral ornaments, and other sorts of female adornments; but now the greater part engage in agriculture. The caste contains many sub-divisions, usually named after their ordinary occupations in times past. Thus the Gázula Balijas sell bangles, the Rállu or Rathnála Balijas sell precious stones, the Muttiála Balijas sell pearls, and the Pagadála Balijas sell coral. One sub-division, the Múta Kammala Balijas, derive their name from the peculiarly-shaped earrings which they wear. A very inferior division of the caste is known as the Uppu or Perika Balijas, who generally carry about salt on donkeys in panniers (perika), but not many of these are found in North Arcot.

The vernacular of the caste is Telugu, and their worship is that of Vishnu combined with Gouridévi, their patron goddess. Widow remarriage is disallowed, but flesh-eating and the drinking of spirits are freely permitted; indeed the latter forms an important feature in their social ceremonies, and a common proverb says 'Balija biḍda puṭṭa valle baṭṭai buḍḍi koṭṭa valle' (if a man be born a Balija, he must crack the arrack bottle).

The caste affixes are Naidu and Chetty, the latter implying superiority and being justly claimable only by those who are descended from the

heads of the caste, but many not strictly entitled to the distinction often assume it. The caste is regarded as rather a mixed one in North Arcot, as persons of impure descent are admitted into the society without scruple. A few families who have more recently come to the country from the north are more particular, and hold themselves aloof from other nominal Balijas.

The Chetties, also called Désái Chetties among them, are regarded with particular respect, not only by Balijas, but by Sudra castes belonging to the right-hand division. They are said to have been entrusted by the nabobs with powers similar to those described as possessed by some of the Linga Balija Chetties.

Kavvaré.—This is simply the Tamil name for Tamilized Balijas, being a corrupt form of Gouri for Gouriputra. They maintain the manners and customs of the Balijas, but often speak Tamil rather than Telugu, calling themselves Naiken.

Vellála.—This caste forms the bulk of the cultivating class in the southern taluks of the district, and numbers about 300,000. The name is derived from Vélanmei (agriculture), which is their usual occupation, though several engage in trade and are employed in the public service and other walks of life. They have no caste puránam, but are referred to in the Bráhmanáda puránam. The story told of their origin is this. Many thousands of years ago, when the inhabitants of the world were rude and ignorant of agriculture, a severe drought fell upon the land, and the people prayed to Bhúdévi, the goddess of the earth, for aid. She pitied them and produced from her body a man carrying a plough, who showed them how to till the soil and support themselves. His offspring are the Vellálas, who aspire to belong to the Vysia caste, since that includes Góvysias, Bhúvysias, and Dhanavysias (shepherds, cultivators, and merchants). A few therefore constantly wear the sacred thread, but most put it on only during marriages or funerals as a mark of the sacred nature of the ceremony. The names end generally with Mudeliár, but sometimes with Goundan. To address them as Mudely is considered discourteous, for that is the title of a weaver. The caste is believed to have been first introduced into this part of India by the Chólas after their conquest of the Kurrumbas. Those in North Arcot are looked down upon by the Vellálas of the more southern districts, since they are careless of caste rules; and while admitting that flesh eating is improper, freely indulge in it, though spirit drinking is condemned by all. They have several sub-divisions, the chief of which are Kondé Katti, Tulluva and Thondaimandalathu Vellálas. The first of these are the highest and proudest, because during the nabobs' government they were employed in the public service. They are extremely strict in their customs, not allowing their women to travel by any public conveyance and punishing adultery with the utmost severity. Another sub-division, called the Kummidi-chatti Vellálas, has disappeared at least in name. They were regarded as low in position.

The term was applied in consequence of their custom of carrying a chatty of fire for all other Vellálas, to be used at funerals for cremation. In default of the Kummidi-chattis, ordinary Vellálas now have to carry their own fire for funerals. Most are in well-to-do circumstances, but the loss of the village merási rights, which they alone formerly possessed, combined with a litigious and somewhat idle character, have made them less prosperous than they must formerly have been. Vellálas are sometimes called Agumadi in villages.

Vellama.—This is a Telugu caste which is not largely represented in the district except in the Kálahastri Division, but a few scattered families are found elsewhere, who assert that they are the descendants of dispossessed poligars. Who the Vellamas were it seems difficult to decide. Some say they form a sub-division of the Balijas, but this they themselves most vehemently deny, and the Balijas derisively call them "Gúni Sákalavándlu" (hunch-backed washermen).[1] Others say that they belong to the Kammas, but divided from them in consequence of a difference of opinion on the subject of gosha, most Vellama females being now kept in seclusion. Both Kammas and Vellamas before they divided are said to have adopted gosha from the Mahommedans, but finding that they were thus handicapped in their competition with other cultivating castes, it was proposed that the original custom of their ancestors should be reverted to. Those who agreed signed a bond, which being upon palm-leaf, was called 'Kamma,' and from it they took their name. The dissentients retained gosha, and were therefore called outsiders or Vellamas. This does not however explain what the original name of the caste was, and the truth of the story is doubtful. Since this dispute the Vellamas have themselves had a split on the subject of gosha, those who have thrown it off being called Ádi or original Vellamas, and the others Padma Vellamas. The Vellamas seem to have come south with the Vijianagar kings, and to have been made ménkávalgars, from which position some rose to be poligars. Now they are chiefly the hangers-on of poligars, or cultivators. To distinguish them from the Vellálas in the southern taluks they call themselves Telugu Vellálas, but it seems very improbable that the Vellamas and Vellálas ever had any connection with one another. They are called Naidu.

Kamma.—Like the Vellamas, these are people who have come from the northern districts of the Presidency as poligars, or in the train of such. Their tradition states that the rishis being troubled by the rákshasas, applied to Vishnu for protection, who referred them to Laksmi. The

---

1 The pride and jealousy of Hindu castes was amusingly illustrated by the Vellamas of Kálahastri. The Deputy Tahsildar of that town was desired to ascertain the origin of the name Gúni Sákalavándlu, but as soon as he asked the question a member of the caste lodged a complaint of defamation against him before the District Magistrate. The nickname appears to have been applied to them, because in the northern districts some print chintz, and carrying their goods in a bundle on their backs, walk stooping like a laden washerman.

goddess gave them a casket containing one of her ear ornaments (kamma), and enjoined them to worship it for a hundred years. At the expiry of that period a band of 500 armed warriors sprung from the casket, who at the request of the rishis attacked and destroyed the giants. After this they were directed to engage in agriculture, being promised extensive estates and the consideration paid to Kshatrias. They accordingly became possessed of large territories, such as Amrávati and others in the Kistna, Nellore, and other districts, and have always been most successful agriculturalists. In North Arcot they are sometimes divided into the Gandikóta, Gódajáti, and Gampajáti Kammas, names which have reference to a deadly struggle which they once had at Gandikóta, in which they were almost destroyed, but a few escaped by hiding behind a wall (góda) or in baskets (gampa). Another classification is into Pagóda mukara and Bangáru mukara Kammas, the women of the former division wearing a nose ring with coral and the latter one of gold. The subdivisions may eat together, and in the houses of Brahmans, Kómatis, Kápus, and Vellamas, but they do not intermarry. They are most industrious and intelligent cultivators, who, now that gosha has been generally abandoned, beat all rivals out of the field, a fact which is recognized by several proverbs, such as 'Kamma váni chétulu kattiná nilavadu' (though you tie a Kamma's hands, he will not be quiet). 'Kamma vándlu cherithé kadamá jathulu vellunu' (if Kammas come in, other castes must go out), 'Kamma váriki bhúmi bhayapaduthunadi' (the earth fears the Kammas), and many others to the same effect. In addition to being industrious and well to do they are very proud, an instance of which occurred in the Kistna District, when the Revenue Settlement Officer offered them puttahs in which they were simply called Naidu without the honorific ending "gáru." They refused on this account to accept them, and finally the desired alteration was made, as they proved that all of their caste were considered entitled to the distinction. In North Arcot however they are not so particular, though some refuse to have their head shaved, because they scruple to bow down before a barber. Besides Vishnu the Kammas worship Ganga, because they say that long ago they fled from Northern India to avoid the anger of a certain rájah who had been refused a bride from among them. They were pursued, but their women, on reaching the Mahanadi, prayed for a passage to Ganga, who opened a dry path for them through the river. Crossing, they all hid themselves in a dholl field and thus escaped from their pursuers. For this reason, at their marriages they tie a bunch of dholl leaves to the north-eastern post of the wedding booth and worship Ganga before tying the táli.

Kápu or *Reddi*.—This is a numerous Telugu cultivating caste, which is often found also in the Tamil country. Cultivation is their ordinary occupation, the name Kápu signifying cultivator, and in their customs they resemble other ordinary Sudra castes. There are several divisions among them, the chief being the Pákanáti, Pókanáti, Désúr, Panta,

Peddaganti, Pallam, Morasa, Palli, Thóta, and Yerlam Kapús. The caste title of all these is Reddi, and the names of their sub-divisions are derived from their original country or their particular occupations. Thus the Pákanáti Kápus are those who came from the east country (prák = east and nádu = country). The Pókanátis are from the Areca-palm (póka) growing land. The Désúr Reddis were apparently residents originally of some place called Désúr, though some of them derive the word from "daha" body and "surá" valour, saying that they were renowned for their courage. The Pantas are so called from 'panta' a crop; the Peddagantis from some place called Peddagallu, said to lie in the north country. The Pallams are low-country folk (pallam = lowland), and the Morasas are said to have got their name because they used to weave mats and baskets, though now they only cultivate. The Pallis were the day labourers, and the Thóta Kápus those who were chiefly engaged in raising betel, sugarcane, or plantain gardens, in contradistinction to the Pantas, who went in for the more ordinary kinds of crop. The last division, Yerlam Kápus, are the most peculiar of all, and are partly of Brahmínical descent. The story goes that a Brahman girl Yerlamma not having been married by her parents in childhood, as she should have been, was for that reason turned out of her caste. She was taken compassion on by a Kápu, or some say a Bésta, man, by whom she had many children, the ancestors of the Yerlam Kápu caste. In consequence of the harsh treatment of Yerlamma by her parents and caste people, all her descendants hate Brahmans with a deadly hatred, and look down upon them, affecting also to be superior to every other caste. They are most exclusive, refusing to eat with any other caste whatever, or even to take chunam from any but their own people, whereas Brahmans will take lime from a Sudra provided a little curd be mixed with it. The Yerlam Kápus do not employ priests of the Brahman or other religious classes even for their marriages. At these no 'hómam' ceremony is performed and no worship offered to Vignéswara, but they simply ascertain a fortunate day and hour and get an old matron (Sumangali) to tie the táli to the bride's neck, after which there is feasting and merry-making.

Vannia.—These are a Tamil cultivating class, which is very numerous in the southern taluks, but regarded generally as of inferior status. The name is derived from the Sanskrit *Vanhi* "fire," in consequence of the following legend. In the olden time two giants named Vádábi and Máhi worshipped Bramha with such devotion that they obtained from him immunity from death from every cause save fire, which element they had carelessly omitted to include in their enumeration. Protected thus they harried the country, and Vádábi went the length of swallowing Váyu, the god of the winds, while Máhi devoured the sun. The earth was therefore enveloped in perpetual darkness and stillness, a condition of affairs which struck terror into the minds of the dévatas and led them to appeal to Bramha. He, recollecting the omission made

by the giants, directed his suppliants to desire the rishi Jámbava Mahámuni to perform a yágam or sacrifice by fire. The order having been obeyed, armed horsemen sprung from the flames, who undertook twelve expeditions against Vádábi and Máhi, whom they first destroyed and afterwards released Váyu and the sun from their bodies. Their leader then assumed the government of the country under the name of Rudra Vannia Maharájah, who had five sons, the ancestors of the Vannia caste. These facts are said to be recorded in the Vaidéswara temple in Tanjore. The Vannias have, apparently recently, raised a claim to be considered Kshatrias, which is ridiculed by all other castes. They, however, quote several common stanzas in which acknowledged Kshatria kings are called Vannia, Palli, or Naiker, and point to their sacred thread and the mantrams which they have always repeated morning and evening. Other castes declare that they are a link between Sudras and outcastes, and that an unscrupulous Brahman, after investing one of them with the cord, taught him the morning and evening mantram. Their pretensions certainly seem modern, and the manners of most are rude. They allow widow remarriage, make divorce extremely easy, and eat flesh without scruple. In the marriage ceremony exists the peculiarity that the first of the posts supporting the booth must be cut from the Vanni, a tree which they much reverence because they say the Pándavas, who were like themselves Kshatrias, during the last years of their wanderings deposited their arms in a tree of this species. This wood was used to produce fire for performing yágams. The ordinary caste name is Goundan, though a few call themselves Mudely or Naiker, the latter a really Telugu affix, to which they have no real claim. *Palli* is another name for the same caste, but is usually applied to those who are in the lower ranks of life.

Malayáli.—This is a Tamil-speaking hill tribe, engaged in agriculture and found in several villages lying upon the Jewádi Hills in the Vellore and Pólúr Taluks. In some points they differ from the plain people, but in most they resemble them. Their caste name is Goundan. The account they give of their origin is as follows. In S.S. 1055 (A.D. 1132) some of the Védárs of Kangundi asked that wives should be given them by the Kondékatti Vellálas of Conjeeveram. They were scornfully refused, and in anger kidnapped seven young Vellála maidens, whom they carried away to Kangundi. To recover them seven Vellála men set out, with seven dogs, leaving instructions with their wives that if the dogs returned alone they should consider that they had perished, and should cause their funeral ceremonies to be performed. Arrived at the Pálár, they found that river in flood and crossed it with difficulty; but their dogs, after swimming half way, turned back and returned to Conjeeveram. These men, however, continued their journey and killed the Védars who had taken away their maidens, after which they went back to their homes, but found that they had been given up as lost, their wives had become widows, their funeral ceremonies performed,

and they were in consequence outcastes. Under these circumstances they contracted marriages with some Védar women and retired to the Jewádis by way of Arni and Padavéd, where they took to cultivation and became the ancestors of the Malayáli caste. This account has long been preserved by the Malayális in a small palm-leaf book, which none can read, as all are utterly ignorant of letters. In appearance and dress they do not differ from the Vellálas, but their women until a few years ago are said to have left the whole of the upper portion of the body bare. The soil of the hills is very fertile, and they have to exert themselves but little to earn a livelihood. The assessment paid to Government by them is a fixed charge for each plough or hoe possessed, without reference to the extent of land cultivated. They also collect jungle produce, particularly the pollen (Kapila podi) of a certain flower, which is used by the Rangáris for dyeing silk a rich orange, and the roots of a plant called Shenalinshedi, supposed to possess wonderful medicinal virtues, curing, among other things, snake-bite.

Their houses are long, low, thatched structures, with the roof secured against the high winds prevailing on the hills by long bamboos pegged down at intervals. Each stands in a yard surrounded by a palisade of wattled bamboos. The village precincts are regarded as sacred, and even Brahmans are desired to walk barefoot along their alleys.

Their worship is somewhat peculiar and kept more or less a mystery. Its chief object is the goddess Káli, in whose honour they celebrate a feast once a year lasting for fifteen days. During this time no people of the plains venture near them, believing that no intruder will ever leave the spot alive. Even the Malayáli women are studiously debarred from witnessing the rites, and those who take part in them are not permitted to speak to a woman even should she be his wife. The ceremonies take place in the open air, at a particular spot on the hills, where the goddess is said to be adored in the shape of a stone called Vellandiswámi. The nature of the rites it is difficult to learn. In the village they worship, also excluding the women, small images of Venkatéswara of Tirupati, which are carefully concealed in caskets and not allowed to be seen by people of other castes.

The Malayáli mode of saluting a fellow caste man is peculiar: each stops and touches the ground with the hands. When a stranger of the caste approaches the village, the first man who sees him salutes, and then relieves him of the bamboo stick which all carry. He then conducts him to his house and places the stick in a corner as a sign that the visitor shall receive hospitality in that house alone. Should, however, the visit have been particularly intended for another, the stick is handed over to the desired host, who puts it in a corner of his room, for where the stick is there the owner must feed. Marriage ceremonies are performed without the intervention of a Brahman and without the recital of any mantrams. The bridegroom gives the father of the bride 7 kallams of sámé, Rupees 7 in cash, and a pile of firewood sufficient for the wedding feast,

which lasts for two days. On the first day the food consists of rice and dholl, and the entertainment is called "peria virunthu." On the second day pork-curry is the meat consumed, and the feast is consequently called the "puni virunthu." At sunrise on the third day the bridegroom produces the táli and ties it. The marriage tie, however, appears very loose, and infidelity in the caste, on the part of either sex, is not punished by excommunication. A wife may at pleasure desert her lawful husband and live with any other man of the caste, but all her children are considered to be those of her husband alone.

Nothing more than this is known of the caste. They live a very amiable, harmless life, never appearing in the courts and rarely quarrelling. They are ruled by a headman called the "Náttán," whose decisions are received with unfailing obedience. It has been proposed to make an attempt to educate the Malayális, but they are not anxious for it, and it would be difficult to start a school in their feverish hills. One or two Malayáli boys have quite recently been induced to come to a school in Pólúr, but they seem very unhappy and homesick, and it is doubtful if they will stay.

Muttarása or *Vékari.*—This is a Telugu caste, most numerous in the Chandragiri Taluk, but found all over the district in the person of the village tallári or watchman, for which reason it is often called the tallári caste. They proudly call themselves poligars, and in Chandragiri "doralu," or lords, because several of the Chittoor páliems were in possession of members of their caste. They seem to have entered the country in the time of the Vijianagar kings, and to have been appointed as its kávelgars. The caste is usually esteemed by others as a low one. Most of its members are poor, even when they have left the profession of tallári and taken to agriculture. They eat in the houses of most other castes, and are not trammelled by many restrictions. In Chandragiri they rarely marry, but form connections with women of their caste, which are often permanent, though not sanctioned by the marriage ceremony, and the offspring of such associations are regarded as legitimate.

Little is known of the caste history, as the people are very ignorant; but some assert that they were formerly Hindu cotton cleaners, and that their name is derived from the verb "yékuta," to clean cotton. They call themselves Naidu, or in Tamil taluks Naiken.

Mahratta.—This term is usually applied to the various Mahratta Sudra castes which have come south; their caste affix is always Row. It is impossible to discover to what particular Sudra division each belongs, for they do not seem to know and most take advantage of being away from their own country to assert that they are Kshatrias, a claim which is ridiculed by other castes. In marriages they are particular to take a bride only from within the circle of their own family, so that a mixture of the original castes is thus avoided. Their language is Mahratta, but they speak Telugu or Tamil as well, and engage in most professions.

Many are tailors. Others enlist in the army, in the police, or as peons, and several take to agriculture or trading. They are of middle stature, but active, robust, industrious, and intelligent. In their customs they much resemble the Rangáris. They are frequently but erroneously called Bondilis.

Bondili.—These are foreigners from Bandelkand, from which fact their name originates, and are of various Vysia and Sudra castes; the former having the termination Lálas to their names, and the latter that of Rám. Many of the Sudra Bondilis however improperly take the title Sing, and say they are Kshatrias, that is, Rájputs. The Vysia Bondilis are few in number and only found in Vellore, Chittoor, and Arni, where they are usually money-lenders. The Sudras are mostly sepoys, constables, or revenue peons. Some say that they are not even Sudras, but the descendants of Rájputs by women of the country, and probably many of them are such. All are very particular with respect to eating with another professed Bondili, and refuse to do so unless they are quite certain that he is of their class. In their marriage customs they resemble the Rájputs.

SERVING CASTES.

Kummara, Telugu; *Kusava*, Tamil.—These are the potters of the country, and were probably at one time a single caste, but are now divided into Telugus, Northern Tamilians and Southern Tamilians, who have similar customs but will not intermarry or eat together. Their names are derived from the Sanskrit "ku," signifying earth, the material in which they work. The northern and southern potters differ in that the former use a wheel of earthenware, and the latter one made of wood. The Telugu potters are usually followers of Vishnu and the Tamilians of Siva, some being also Lingavites and therefore burying their dead.

All the potters claim an impure Brahminical descent, telling the following story regarding their origin. A learned Brahman, after long study, discovered the day and hour in which he might beget a mighty offspring. For this auspicious time he waited long, and at its approach started for the house of his selected bride, but floods detained him, and when he should have been with her he was stopping in a potter's house. He was, however, resolved not to lose the opportunity, and by the daughter of his host he had a son, the celebrated Sálivához. This hero in his infancy developed a genius for pottery, and used to amuse himself by making earthen figures of mounted warriors, which he stored in large numbers in a particular place. After a time Vikramárka invaded Southern India and ordered the people to supply him with pots for his army. They applied to Sálivához, who miraculously infused life into his clay

figures and led them to battle against the enemy, whom he defeated, and the country (Mysore) fell into his hands. Eventually he was left as its ruler, and became the ancestor of the early Mysore Rájahs. Such is the story current among the potters, who generally believe that they are his progeny. They all live in a state of poverty and ignorance and are considered of a low rank among other Sudras, whom they resemble in their customs. Flesh-eating, though said to have been originally prohibited, is now permitted, but not widow remarriage.

Mangala, Telugu; *Ammata*, Tamil.—These are the barber castes, and are probably of identical origin, but, like the potters, they have by difference of locality separated into Telugus and Tamilians, who do not intermarry. They number 22,000, or 1·2 per cent. of the population. Both are said to be the offspring of a Brahman by a Vysia woman. The Telugu name is referred to the word "mangalam," which means "happiness" and also "cleansing," and is applied to barbers because they take part in marriage ceremonies and add to the happiness of the occasion by the melodious sounds of their flutes (nagésaram), while they also contribute to the cleanliness of the people by shaving their bodies. The Tamil name is supposed to be derived from "Ambu" (near) and "tishtati" (to be), because barbers bend over those whom they operate upon. They are sometimes called "Návithár," or those who should not be touched, and are always considered so low and unclean that all classes, after making use of their services, have to bathe. The Telugus are divided into the Reddibhúmi, Murrukanádu, and Kurrichinádu sub-divisions, and are mostly Vishnuvites. They consider the Tamilians as lower than themselves, because they consent to shave the whole body, while the Telugus only shave the upper portions. The Tamil barbers seem to have no sub-divisions and many worship Siva.

Besides their ordinary occupation, the members of this caste dabble in surgery, and their females practise midwifery in a barbarous fashion, not scrupling also to indulge largely in criminal acts connected with their profession. Flesh-eating is allowed, but not widow marriage.

Sákala, Telugu; *Vannán*, Tamil.—Like the barbers, these washerman castes are described as the descendants of a Brahman and a Vysia woman. In North Arcot they number 34,000. Possibly they may once have been identical with the barbers, but now they are themselves divided into Telugus and Tamilians, who do not intermarry. The Tamil name is connected with the word "van," white; the origin of the Telugu term seems not to be known. They appear to have no sub-divisions and no peculiar customs. Having to purify all the filthy linen of the villagers, they are naturally regarded as a low, unclean class of Sudras, and are always poor. They add to their income legitimately by hiring out the cloths of their customers to funeral parties, who lay them on the ground before the pall-bearers, so that these may not step upon the ground, and illegitimately by letting them out on the sly to persons wishing to use them without being able to purchase for themselves.

FOOD-SUPPLYING CASTES.

Ídiga, Telugu; *Sána*, Tamil.—These are toddy-drawers, of whom there are 30,000 in the district. The Telugu name is connected with 'ídtsu,' to draw. The Telugus are chiefly Vishnuvites, having Satánis as their priests, and the Tamils Sivaites. They may eat together, but never intermarry. The Telugu people are divided into two classes, the Dandu Ídigas and the Balija Ídigas, of whom the former used formerly to distil arrack, but now that the manufacture is a monopoly, they usually sell it. The Balija Ídigas extract toddy, the juice of the palm tree. They differ from the Sánas in some of their professional customs, for, while the Tamilians in climbing tie their knives behind them, the Telugus tie them downwards on the right thigh. Tamilian drawers extract the juice from palmyras and cocoanuts, but rarely from the date, and the Telugus from the palmyras and dates, but never from cocoanuts. In other respects their customs are similar, and they are equally a drunken, dissipated, and impoverished class. They look down upon washermen, barbers, koravas, béstas, woddas, and such mean castes, but do not scruple to take food from other more respectable Sudras. They appear to have no tradition regarding their origin.

Golla, Telugu; *Yedaya*, Tamil.—Most of the shepherds belong to this caste, which probably numbers some 100,000. They are particularly ignorant, and have no tradition about themselves except that Krishna was brought up among them, and he is therefore their favourite deity, though they generally profess to worship Vishnu. The caste title of the Telugu shepherds is commonly Mandadi, and of the Tamilians "Pillei." The latter frequently call themselves Yádavas, and it seems likely that the more common term Yedaya may be a corruption of this, though it is often described as signifying the middle (idei) caste among the various Sudras. As a fact they do hold a respectable middle position, and though poor are not looked down upon, for they tend the sacred cow. Sometimes they assert a claim to be regarded as representatives of the Góvysia division.

The Gollas are sub-divided into the Puni, Erra, Ratcha, and Karapa Gollas, with probably a few more, but Yedayas appear to have no such differences. They are quiet, inoffensive, and comparatively honest. In the time of the nabobs this last characteristic secured to them the privilege of guarding and carrying treasure, and even now those who are employed in packing and lifting bags of money in the district treasuries are called gollas, though they belong to other castes.

Kurrumba, Tamil; *Kurruba*, Telugu.—This is a very interesting caste of shepherds, found almost solely in the Mysore plateau, but also in Chittoor and Gudiyátam, and in very small numbers in the southern taluks. Their home language is a rather corrupt Canarese, and they are certainly foreigners from Mysore, the remnants probably of those who after

peopling the country surrounding Conjeeveram were ousted by the Chólas. They tend only sheep and goats, and weave the long wool of the former (called in the plains Kurrumba ádu) into coarse cumblies, but, unlike the Kurrumbas of the Neilgherries, have no reputation for supernatural powers. The name is apparently derived from the Canarese word for sheep "kurru." Both males and females clothe themselves in woollen cumblies, those of the women being arranged in a peculiar way, attributable to the coarse texture of the fabric, drawn across over the bosom and not at the waist, and an end is not therefore thrown over the shoulder as in the case of those who wear cotton cloths.

The Hindus say, and the Kurrubas seem to believe, that they are the descendants of a Kápu man by a concubine of the same caste, but this does not seem at all probable. There are three divisions, the Ándé, Kottha (new), and Pátha (old) Kurrubas. The last are the highest in position, being the legitimate descendants of the original members of the tribe, and the two others the children of those who did not go through the formality of marriage; but for some reason the Ándé Kurrubas are regarded as the lowest of all, perhaps because they allow remarriage of widows with a widower, while the Kottha Kurrubas do not, though the Pátha Kurrubas do. The Ándé Kurrubas weave the finest and best cumblies with a superior sort of machine, which the other two divisions refuse to employ, and consequently turn out very coarse stuffs. All three divisions may eat together, but never intermarry. They are still further divided into clans or "gumpus," each having a headman called a gowdu, who gives his name to the clan. Intermarriage is allowed, the child belonging to the father's 'gumpu' and worshipping his deity. There is a separate household deity for each clan, apparently the common ancestor. The names Battiappa, Irsikappa, suggest this, and the people admit that they were not supernatural beings but only heroes. The gowdu is entrusted with the custody of a golden image representing the hero of the clan, and keeps it carefully in a small box filled with turmeric powder. Once a year several neighbouring clans assemble at one of their bigger temples, which is lighted with ghee, and placing their images in a row, offer to them flowers, cocoanuts, milk, &c., but do not slay any victim. The Pátha Kurrubas on these occasions break cocoanuts upon the heads of those among their number who have an hereditary right to the distinction, but the other two divisions do not adopt this apparently inhuman practice. A pujári or priest of their caste, supposed to have some supernatural power, officiates, and begins by breaking a few nuts on the heads of those nearest to him, and then the rest go on, the fragments belonging by right to those whose skulls have cracked them, and who value the pieces as sacred morsels of food. For a month before this annual ceremony all the people have taken no meat, and for three days the pujári has lived on milk alone. At the feast therefore all indulge in rather immoderate eating, but drink no liquor, calling excitedly upon their particular god to grant them a prosperous year.

Once in ten or fifteen years a still bigger feast takes place, with the same preparatory abstinence, the same ceremonies are gone through, but with more noise and clamour, and finally the head of every child who may have been born since the last similar festival is shaved.

At their marriage ceremonies, conducted by the púját, the image of the tribal hero is taken out of the saffron powder in which it has lain in its casket, and placed before the bride and bridegroom, who call aloud the hero's name. The púját then breaks a few cocoanuts on the heads of the hereditary cocoanut breakers, and ties a piece of saffron to the right arm of the bride. With the Pátha Kurrubas the string used must be of cotton and wool mixed; with the Kottha Kurrubas of wool alone; and with the Ándé Kurrubas of unmixed cotton, this being regarded as an important distinction. Next the gowdu and púját throw rice upon the bride's head, and the bridegroom tying a táli round her neck the ceremony is completed.

The temples of this caste are usually rather extensive, but rude, low structures, resembling an enclosed mantappam supported upon rough stone pillars, with a small inner shrine, where the idols are placed during festival time. A wall of stones encloses a considerable space round the temple, and this is covered with small structures formed of four flat stones, three being the walls and the fourth the roof. The stone facing the open side often has a figure sculptured upon it representing the deceased gowdu or púját to whom it is dedicated. For each deceased person of this rank one of these monuments is constructed, and here periodically, and always during the annual feasts, púja is made not only to the spirits of the deceased chiefs but also to those of all who have died in the clan. It seems impossible not to connect this with those strange structures called by the natives Pándava's temples. They are numerous where the Kurrubas are now found, and are known to have been raised over the graves of the dead. Though the Kurrubas bury, they do not now raise their monuments over the resting-place of the corpse, nor can they build them upon anything approaching to the gigantic scale of the ancient kistvaen or dolmen.

Those of the caste who are found scattered among the Tamil people and called Kurrumba also speak Canarese, mixed however with Tamil, and are visited by pújaris from Mysore. None weave cumblies and only some keep sheep, others being cultivators, cart drivers, and the like. They have forgotten the names of their idols, and have taken the title Naiken; while Kurrubas, except the gowdu, have no addition to their simple names. The Kurrumbas raised no monuments in honour of their dead, and possess no temples of their own. They have in fact lost most of their tribal customs and peculiarities.

Bésta.—This is a Telugu caste, the proper occupation of which is hunting and fishing, but they have largely taken to agriculture and the profession of bearers and cooks; as the last they are very skilful, being usually employed by poligars and rich Sudras. Many also trade, and all

are in a flourishing condition, being most numerous above the ghauts. The name appears to have no meaning, but they call themselves "Sútha-kulam," and say they are the descendants of the rishi Sútha Mahámuni. The term Sútha also applies to the offspring of a Kshatria by a Brahman, but it seems more probable that the Béstas gained the name from their superiority in the culinary art, 'Sútha' also meaning 'cook.' In their customs they resemble other Sudras who eat flesh. They are divided into Telugu Béstas and Parikithi Béstas, the difference between them being chiefly one of religious observance, the former being in the habit of getting themselves branded on the shoulders with the Vishnuvite emblems chank and chakram, and the latter never undergoing this ceremony. It is a rule with them to employ Dásaris as the messengers of a death, and Sákalas as those of a birth, or of the fact that a girl has reached womanhood. Their chief object of worship is Hanumán, 'the monkey god,' a picture or figure of whom they always have in their houses for domestic worship.

Bóya.—This is another Telugu hunting caste, chiefly found above the ghauts. Many of the poligars of that part of the country used to belong to the caste, and proved themselves so lawless and turbulent that they were dispossessed. Now they are usually cultivators. They have several divisions, the chief of which are the Mulki Bóyas and the Pala Bóyas, who cannot intermarry. Their most peculiar custom relates to marriages, in which the bride, besides having a golden táli tied to her neck, has an iron ring fastened to her wrist with a black string, and the bridegroom has the same. Widows may not remarry or wear black bangles, but they wear silver ones. They bury their dead and used Mádigas as their messengers on such occasions. The Tirupati swámi and the goddess Gangamma are the chief objects of their devotion.

Sambadava.—These are the Tamil representatives of the above hunting tribes, being in number about 25,000. The name is by some said to be derived from "Swámi-padavar" (Siva's boatmen), but by others, and more probably, from "Sempadavar" (good boatmen). They are only found in the Tamil portion of the district, where they do not hunt, but act as boatmen and fishers. They have little opportunity of exercising the former profession, but during heavy freshes in the big rivers they ferry people from bank to bank in round leather covered basket coracles, which they push along, swimming or wading by its side, or assist the timid to ford by holding their hands. At such times they make considerable hauls. During the rest of the year they subsist by fishing in the tanks. They are Sivaites and some worship the lingam, but all chiefly reverence a goddess called Angálammál, whom they describe as a Sembadava girl of whom Siva became enamoured. To this sákti they occasionally offer animal sacrifices, and many of the inferior Sudra castes gathering up the ashes of the sacrificial fires use them for making Siva marks upon their bodies. According to their own account Siva was much pleased with their ancestors' devotion to him

when they lived upon the seashore by catching a few fish with difficulty, and in recognition of their piety furnished them with a net and directed various other castes to become fish-eaters, so that the Sembadavar might live comfortably. They are never in well-to-do circumstances, but rarely in want, as their profession supplies them pretty regularly with food, and there is a large demand for fish among the people.

RELIGIOUS AND MENDICANT CASTES.

Púját́i.—This is a class of Tamil priests, who mostly preside in the temples of the female deities called sáktis, and not in those of Vishnu or Siva. They call themselves Wókshatrias, but do not wear the thread except on solemn occasions. They say that they are the descendants of Kamban, the celebrated Tamil poet and author of the Kamba Rámáyanam, who was the son of a Kshatria woman by a Brahman. His gift of poetry and the profession of his progeny are accounted for by the following legend. Kamban was the paramour of a dancing girl, and accompanying her to the temple used to sleep while she discharged her duties before the idol. In the same temple a very devout worshipper used daily to offer up prayers, and finally obtained the good-will of the goddess, who appeared and touched him. Absorbed in his devotions he hastily concluded that she was the dancing girl who had mistaken him for Kamban, to whom he pointed and continued his prayers. The goddess was hurt at his slight, and going to Kamban woke him and wrote some mystic letters on his tongue, the result of which was that he became a poet and dedicated his sons to the service of the sakti.

The Pújáris are an ignorant, superstitious, and deceitful class, playing upon the credulity of the Sudra castes, from whom they levy large contributions by assigning to the sáktis marvellous powers, and recounting lying stories of extraordinary cures performed by them. The worship they conduct is the most sensual and degrading of any practised by the Hindus, animal sacrifices, excessive indulgence in spirits, and indecent orgies being its characteristics. They are themselves a dissolute and intemperate class, who eat flesh and drink liquor often to excess. Like the Lingavites they always bury their dead.

Sátáni.—This is a mixed religious sect, recruited from time to time from the worst specimens of other castes excepting Pariahs, leather workers, and Mahommedans. They are divided into Telugus and Tamils, of whom the latter refuse to eat flesh or drink spirits, while the Telugus do both, alleging that it was the ancient custom. The name appears to be a play upon the Telugu word "Chátani," and the names of Chaitanya and Sanatana, the reformer who originated the sect and one of

his most celebrated disciples. "Chátani" signifies "not retaining," and since Sátánis do not keep the sacred thread or the usual lock of hair upon the head, the term is applied to them. They often claim an equality with Brahmans. All are Vishnuvites, but principally revere one Báshikár, whom they assert to have been an incarnation of Vishnu. There are three religious divisions, Yékáchary, Chaturáchary, and Ashtáchary. The first believes that faith in the deity is the sole means of attaining bliss; the second adds faith in the guru as a necessary qualification; while the third asserts that faith in the guru is alone sufficient to secure eventual salvation. The members of these divisions do not eat together or intermarry. Other divisions are named Chattrakolithíparulu, Chattathílu, Dásanambulu, and Sammania Vaishnavas. Of these the first is very exclusive and the second is considered higher than the two last, accepting wives from among them, but refusing to give their daughters in exchange or to eat with them, though those divisions have no hesitation in taking food from the Chattathílu. The Sátánis are almost entirely confined to the larger towns. Their only legitimate occupations are performing menial services in Vishnu temples, begging, tending flower gardens, selling flower garlands, making fans, grinding sandalwood into powder, and selling perfumes. They are the priests of some Sudra castes, and in this character correspond to the Sivaite Pandárams. Widow remarriage is not permitted. Some burn and some bury their dead.

Dásari, Tamil; *Tháda*, Telugu.—This is another mendicant caste of Vaishnavas, the reputed descendants of a wealthy Sudra of one of the northern districts, who, being devoid of offspring, vowed that should he be blessed with children, he would devote one to the service of his god. He subsequently had many sons, one of whom he named Dásan (most obedient servant), and placed entirely at the service of the deity. Dásan forfeited all claim to participate in his father's estate, and his offspring are therefore all beggars. The caste, like that of the Sátánis, is reinforced by idle members of the lower Sudra classes, who, being branded by the gurus of Tirupati and other shrines, become Dásaris thereby. They usually wander about, singing hymns to a monotonous accompaniment upon a stringed instrument called "tappai." Some Sudra castes engage them thus to chant in front of the corpse at funerals, and many, accompanying bands of pilgrims travelling to Tirupati, stimulate their religious excitement by singing sacred songs. A few called Yerrudandis take possession of young bulls that have been devoted to a swámi and teach them to perform tricks very cleverly. The bulls appear to understand what is said to them, and go through various antics at the word of command. Some Dásaris exhibit what is called the "Pamda Sérvai" performance, which consists in affecting to be possessed by the spirit of a deity, and beating themselves all over the body with a flaming torch, after covering it probably with some protecting substance. In such modes do they wander about and receive alms, each wearing as a

distinction a garland of tolasi seeds. Every Dásari is a Thengalei. They have six divisions, called Balija, Janapa, Palli, Valluva, Ganigeddulu, and Golla Dásaris, which neither eat together nor intermarry. As these are the names of existing and distinct castes, it is probable that the Dásaris were formerly members of those classes who, through their vagabond tastes, have taken to a mendicant life. Beyond prohibiting widow remarriage they have no social restrictions.

Panisiva.—This appears to answer among the Tamilians to the Dásaris or Thádas of the Telugus. It is a mendicant caste worshipping Siva. As the Telugu Sudra castes generally employ Thádas to carry out invitations to weddings and funerals, so do the Tamilians employ the Panisivas, and also engage them to blow conch shells at both these ceremonies. Unlike the Thádas, however, they often employ themselves in cultivation, and are on the whole a more temperate, respectable class.

Pandáram.—These are the priests of the Tamil Lingavites, and carry about the object of their devotion ostentatiously suspended from the neck or tied to the arm. One derivation for the name is 'pandu' (old), Aran (a name of Siva), signifying that they or their worship were in existence before that deity came into existence. Other derivations are "pandu" (a lingam, and also ashes), and "háram" (a necklet), the members of the caste carrying their lingams attached to a necklace, and smearing themselves over with ashes; or "bandáram" (a servant), since they are specially devoted to the service of the deity. Perhaps there is a play upon all these words.

The Pandárams seem to receive numerous recruits from the Sivaite Sudra castes, who choose to make a profession of piety and wander about begging. They are in reality very lax in their modes of life, often drinking liquor and eating animal food furnished by any respectable Sudra. They often serve in Siva temples, where they make up garlands of flowers to decorate the lingam, and blow brazen trumpets when offerings are made or processions take place. The lower classes of Siva worshippers accept them as their priests, and they themselves do not recognize the priestly character of the Brahmans, except of one division called Árádhi, which is very seldom met with in this district. Tirutani is one of the chief places in which Pandárams congregate.

Jangam or *Jangálam.*—These are the Telugu representatives of the Pandáram caste, and like them priests to the lower Telugu Lingavite castes. They too are very lax in the observance of the rules of their religion, eating in any Sudra's house, drinking spirits, and generally eating flesh. The Linga Balijas are on the contrary most particular not to do any of these things. The name is said to be derived from ja-ga-nam, roots conveying the meaning of birth, motion, and life, and referring to the religion which sprung up, progresses, and will never die.

Jhógi.—The members of this caste are, like the Dásaris, itinerant jugglers and beggars. They seem to have come from Mysore, and have the head of their caste in Bangalore. They are divided into those who

sell beads and those who keep pigs. They are dexterous snake charmers, and pretend to a profound knowledge of charms and medicine; but their habits are filthy and their customs low. They have no restrictions regarding food, may eat in any Sudra's house, and allow widows to live in concubinage, only exacting a small money penalty and prohibiting her from washing herself with turmeric water. Their marriage customs are somewhat peculiar. The wedding booth must contain twelve posts, and both bride and bridegroom must present four sheep and ten pots to the assembled guests. Should either fail, he or she receives three blows in the hand, is fined Rupees 3, and has cow-dung and water poured upon the head. Part of the fine goes to the head of the caste, and the rest is spent in liquor, with which the party make merry.

Valluva.—These are supposed to be the descendants of Tiruvalluvar, the celebrated Tamil poet, who was the son of a Brahman by a Pariah woman. He had two brothers and four sisters by the same parents, named Kapilar, Adigamán, Uppai, Úrruvai, Avvaiyár, and Valli, all celebrated for learning, but only Valluvar and Avvaiyár produced books which are considered eminent. Tiruvalluvar refused to acknowledge the distinctions of caste, and succeeded in obtaining a Vellála woman as his wife, from whom the Valluvas say they have their descent. As their ancestor amused himself in the intervals between his studies by weaving, they often employ themselves in mending torn linen, but chiefly live by astrology and by being the priests of Pariahs and officiating at their funerals and marriages, though some refuse to take part in the former inauspicious ceremony, and leave the duty to those whom they consider impure Valluvas, called Pariah Tádas. By other castes the Valluvas are regarded as Pariahs. There are both followers of Vishnu and Siva among them: the former greatly reverence the Álwár kite, the vehicle of Vishnu, and are often called Álwár Dásaris. Both Sivaites and Vishnuvites eat together, but do not intermarry. Unlike Pariahs they forbid remarriage of widows and even polygamy, and all males above twelve years of age wear the sacred thread.

Banda and Mondi.—These two names seem to be applied to one and the same class of beggars, who lay no claim to a religious character. Though regarded as Sudras, it is difficult to think them such as they are black and filthy in their appearance and disgusting in their habits. Happily their numbers are few; they wander about singing or rather warbling, for they utter no articulate words, and if money or grain be not given to them, they have recourse to compulsion. The implements of their trade are knives and ordure. With the former they cut themselves until they draw blood, and the latter they throw into the house or shop of the person who proves uncharitable. They appear to possess the power of vomiting at pleasure, and use it to disgust people into a compliance with their demands; sometimes they lie in the street, covering the entire face with dust, keeping, it is said, their eyes open the while, and breathing through the dust. Eventually they always succeed by some of these means in extorting what they

consider their dues. Their own story of their origin is that their ancestor was a shepherd, who had both his legs cut off by robbers in a jungle. The king of the country in compassion directed that every one should pay him and his descendants (originally called nondi or lame) a small amount of money or grain. This has ever since been so persistently demanded, that the names Banda (tricksy knave) and Mondi (troublesome fellow) have been applied to them. They are divided into bands having the exclusive right to collect alms within a particular tract. Thus one party works the Vellore Taluk with its head-quarters at Virinjipuram, and all the Vellore merchants are expected to give them Anna 1½ twice a year, while village householders have to pay four measures of grain per annum. They recognize the authority of a headman living at Conjeeveram, and profess to have the same form of worship as other Hindus, though they seem too degraded to care much about the subject of religion. Adultery in the caste is punished by a fine of Rupees 6 imposed upon both offenders, but if a Mondi woman has been honoured by the attentions of a Sudra, a nominal fine of Annas 4 is demanded from her.

Bhatturázu.—These seem originally to have been the bards who sung the praises of the various petty rájahs and poligars of the country; but their employment in this way has greatly fallen off, and they now live by cultivation and by singing the fabulous traditions current regarding the different Sudra castes at their marriages and other ceremonies, having probably invented most of them. They profess to be Kshatrias and wear the sacred thread, but it is known that several are Mussulmans or members of other castes, who, possessing an aptitude for extempore versification, were taken by rájahs to sing their praises and so called themselves Bhatturázus. They resemble the Rázus in their customs, but are said to bury their dead. They are most numerous in the Chittoor Taluk.

Bhattuturaka.—A few of this very intelligent and educated criminal class are found in the north-west of the Chandragiri Taluk and in the north of Punganúr. They are really Mahommedans, but never worship according to the rules of that religion and know little about its tenets. They have no employment save cheating, and in this they are incomparably clever. They speak several languages with perfect fluency, have often studied Sanskrit, and are able to personate any caste. Having marked down a well-to-do householder, they take an opportunity of entering his service and succeed at last in gaining his confidence; then they abuse it by absconding with what they can lay hands upon. They often take to false coining and forgery, pretend to know medicine, to have the power of making gold or precious stones, or of turning currency notes into others of higher value. In this way they make expeditions and accumulate large sums of money, which they squander in their villages on their return. Their character is very well known, but their cunning such that it is not easy to detect them.

Bhógam, Telugu; *Dási* or *Dévadási*, Tamil.—These are the dancing girls of the Hindu temples and their offspring. Originally they are said to

have been a body of vestal virgins, whose duty it was to fetch water, sweep the temple, and ornament its floor with devices in rice-flour; but after a time they became degraded in moral character, and this was acquiesced in, as it was considered a means of protecting respectable women from insult. They are without exception prostitutes, and some, who are attached to temple establishments, dance and sing before the idol, fan him, and hold before him the sacred light called "Kumbhárati." Their sons are often musicians and teachers of dancing, but many after attaining manhood call themselves Balijas, and taking a wife from that caste, settle down respectably. They are called in Telugu Bhógam because they are women of pleasure (bhógam), and in Tamil Dási or Dévadási (servants of god), on account of their occupation in temples. Temple dancing girls receive a fixed allowance out of the endowment, and some are the concubines of one of the priests or of some native of consideration, while others are common women, as are all who do not serve in the temple. Though they are not allowed to marry, they go through a marriage ceremony which is rather a costly one. Sometimes a wealthy native bears the expense, makes large presents to the bride, and receives her first favours. Where no such opportunity presents itself, a sword or other weapon represents the bridegroom, and an imaginary nuptial ceremony is performed, after which the woman is free to associate with castemen, but not with foreigners or outcastes, though some are not particular in this respect. Should the Bhóga woman have no daughter, she invariably adopts one, usually paying a price for her—the Kykala caste being the ordinary one from which to take a child; but boys are never adopted. Daughters follow their mother's trade and inherit her appointment in the temple if she should hold one. Most of this class are well to do and some very wealthy, having large stores of jewels for personal adornment. Since they may not marry, they can never become widows, and are on this account called 'dírga sumangalis' or perpetual matrons. One of the chief desires of a Hindu bride is to be a sumangali all her life, and to attain this object her new cloths and táli are at her marriage passed round, to be touched and blessed by all the sumangalis present. Those who have been long in this happy state are held to be better able to confer the blessing of lengthened sumangalihood than younger married women, but a dancing girl who can never be a widow has the greatest power of blessing the bride. One of this class is therefore always her companion, a sort of head bridesmaid, and she further gives her hints as to how she should behave to secure her husband's affection by graceful movements and other blandishments. The lower sorts of Sudras are most superstitious on this subject, and always try to purchase their tális from some dancing girl. Bhógams can eat in any house except that of a Pariah, Chuckler, or Mahommedan.

Ádapápa.—This name signifies maidservant, and is applied to the personal female servants in the houses of some of the Zemindars and Poligars of the district. Originally they were women seized by force in war or girls

found without protectors on the estate, who were taken under the chief's protection and made his slaves. They were used for cooking, nursing, and other such domestic services, but were also prostitutes to the people about the palace. Now they are no longer slaves, but consider it improper to desert the family, calling themselves 'Nagari biddalu,' or children of the palace. A few have sought other employment in consequence of the inability of their masters to support them; the men take to different employments, and the women become concubines or prostitutes. While attached to the palace they are always well treated, fed and clothed.

Dommera.—This is a nomad class of acrobats, who in many respects recall the gipsies to mind, and raise the suggestion that their name may possibly be connected with Dom, a recognized form of Rom or Romani among the gipsy tribes. Both men and women are very clever tumblers and tight-rope dancers, exhibiting their feats as they wander about the country. They speak Telugu, Mahratti, and Hindustani, but not generally Tamil, and are regarded as Sudras. They are a predatory class, great drunkards, and of most dissolute habits. The women often practise prostitution.

Sugáli, Lambádi, or Brinjári.—These names seem to be applied to one and the same class of people, though a distinction is made. The Sugális are those who have permanently settled in the district, in some villages of the Punganúr Zemindari, and in the Palmanér Taluk; the Lambádis are those who commonly pass through from the coast to Mysore; and the Brinjáris appear to be those who come down from Hyderabad or the Central Provinces. Their language, here often called Sugáli, appears to be a mixture of Hindustani and Mahratti. Of the bands which pass through the district little is known, except that they carry grain to the coast and salt into the interior upon large numbers of pack bullocks, and that they are great thieves. What their religious belief is it is difficult to discover, but the head of the gang appears to be regarded with great reverence and credited with supernatural powers. He is believed to rule the gang most rigorously and to have the power of life and death over its members. Like the Sugális they are strong and robust and the younger women rather good looking, but a hard life soon destroys all pretensions to beauty in the middle-aged. The women wear very gaudy clothing embroidered in various colours, pink being the favourite, and these clothes they never wash, but cast away when they are too tattered to be worn longer. They also adorn themselves with strings of cowries and bangles of brass work or bone in large numbers. Of the Sugális, who form the sole population of their villages in Punganúr and Palmanér, more definite information can be had. They are divided into four classes, the Bukia, Karamathoth, Mudu, and Vakadoth Sugális. All worship the Tirupati swámi and also two saktis called Kósa sakti and Máni sakti. Some three hundred years ago, they say that there was a feud between the Bukia and Múdu Sugális, and in a combat many were killed on both sides; but the widows of only two of

the men who died were willing to perform sáti, in consequence of which they have been deified, and, are now worshipped as saktis by all the divisions. They are further divided into gangs called 'tanda,' each with a headman or naik, after whom the tanda is named. Their marriage ceremonies last for three days; on the first an intoxicating beverage compounded of bhang leaves, jaggery, and other things, is mixed and drunk. When all are merry the bridegroom's parents bring Rupees 35 and four bullocks to those of the bride, and after presenting them, the bridegroom is allowed to tie a square silver bottu or táli to the bride's neck, and the marriage is complete; but the next two days must be spent in drinking and feasting. At the conclusion of the third day the bride is arrayed in gay new clothes and goes to the bridegroom's house driving a bullock before her. Upon the birth of the first male child a second silver bottu is tied to the mother's neck, and a third when a second son is born; when a third is added to the family the three bottus are welded together, after which no additions are made. Daughters do not count. Married women are moreover distinguished from the unmarried in that they wear their bangles between the elbow and shoulder, while the unmarried have them between the elbow and wrist. Unmarried girls may wear black bead anklets, which are taken off at marriage, at which time they first assume the ravvakei or jacket. Matrons also use an earring called guriki to distinguish them from widows or unmarried girls. The marriage of widows is not allowed, but on payment of Rupees 15 and three buffaloes to her family, who take charge of her children, a widow may be taken by any man as a concubine, and her children are considered legitimate. Even during her husband's life a woman may desert him for any one else, the latter paying the husband the cost of the original marriage ceremony. The Sugális burn the married, but bury all others, and have no ceremonies after death for the rest of the soul of the deceased. They have no tradition of their origin, but this is supplied by the Vagirivélus. Their name is by some said to be a corruption of Supári (areca nut), because they formerly traded largely in this. Now they ostensibly live by selling firewood, but make their chief income by dacoity. Many have of late years been convicted and transported for this offence, and their predatory inclinations have thus been greatly checked.

Vagirivélu.—This is the name, in their own language, of a class which lives by trapping birds. They have no Telugu name, but are called "hunters who hide behind a bullock" (yeddu marigé vétagándlu), or in Hindustani Páradhi and Mír shikári. Their language is a mixture of Telugu and Urdu, and they say that they are Kshatrias of descent similar to that of the Sugális, but unlike the latter they all take the title Singh. They state that many years ago in Rájputána there lived two brothers, the elder of whom was dull and the younger smart. One day they happened to be driving a bullock along a path by the side of a pool of water when they surprised Sítha bathing. The younger

brother hid behind his bullock, but the elder was too stupid to conceal himself, and so both were observed by the goddess, who was much annoyed and banished them to Southern India. The elder she ordered to live by carrying goods about the country on pack bullocks, and the younger to catch birds by means of two snares, which she obligingly formed from hair plucked from under her arm. Consequently the Vagirivélus never shave that portion of their body. In appearance they do not resemble the Sugális, being much darker, if possible dirtier, and not so well dressed. The women generally hawk about needles, while the men trap birds with the aid of hair snares and a bullock, behind which they crouch and imitate the cries of birds in a most perfect manner. The caste is divided into "tandas" or gangs named after its head or Mótó. There is only one gang in this district, of whom the head is Lálmán. The head-quarters is in Vardáreddipalle in the Chittoor Taluk, but parties go out with bullocks and booths to hunt their range, which includes North Arcot, Tripattúr, and Vaniambádi in Salem. When unsuccessful in the profession, they take to begging, and one of the names they give themselves is bhikkári or beggar. Two or three times in the year all the parties assemble at Vardáreddipalle for worship. The objects of this are three saktis called Mahán Káli, Chámandi, and Máhammáy, represented by small silver figures which Lálmán has, from the poverty of the gang, had to mortgage to a Reddi of the village, who lends them to the gang for the few days of the festival. In their other customs they rather resemble the Sugális, but the services of a Brahman are necessary for the marriage of an eldest daughter, while the Mótó performs the ceremony for the rest. A dowry of Rupees 19 is due to the bride's mother, but need not be paid at once, though the mother-in-law causes much unpleasantness if she is kept waiting long. For three years, or until a child is born, the bridegroom must live with his mother-in-law, and after that may set up for himself. They are better behaved than the Sugális and probably less immoral in their ways.

Wodda.—These are the navvies of the country, quarrying stone, sinking wells, constructing tank bunds, and executing other kinds of earthwork more rapidly than any other class, so that they have got almost a monopoly of the trade. They are Telugu people, who came originally from Orissa, whence their name. A legend is current among them to the effect that when Siva and Párvati were one sultry day walking upon the earth, they got very thirsty and hot. The drops of perspiration which fell from Siva were by him changed into a man with a pick and crowbar, while those falling from Párvati turned into a woman carrying a basket. The man and woman quickly sunk a well, with the cooling waters of which the god and goddess refreshed themselves, and in gratitude promised the labourers certain gifts, the nature of which is not now known, but neither was satisfied and both grumbled, which so incensed Siva that he cursed them and vowed that they and their descendants should live by the sweat of their brows. To this the

Woddas attribute their poverty and laborious life. Were they more temperate, they might be in very good circumstances, but as soon as they have earned a small sum, they strike work and have a merry-making, in which all get much intoxicated, and the carouse continues as long as the funds last. They are very ignorant, not being able even to calculate how much work they have done, and trusting altogether to their employer's honesty. They are an open-hearted, good-natured lot, with loose morals and no restrictions regarding food, but they are proud and will only eat in the houses of the higher castes, though most Sudras look down upon them. Polygamy and divorce are freely allowed to men, and women are only restricted from changing partners after having had eighteen already; even this limit is not set to the men. Most of them are Vishnuvites, but some, as might be expected from their tribal legend, worship Siva and his consort.

Uppara.—This people greatly resemble the Woddas in appearance, customs, and manner of earning a living, but they usually speak Tamil and are said to be the descendants of a Wodda by a Tamil concubine.

Médara.—This caste works in bamboo, weaving winnows, baskets, and mats, or making tatties. The origin of the name is not understood, but they say that their ancestor was produced under the following circumstances. Párvati once wanted to perform the ceremony called gourinómu, and wanting a winnow for that purpose, was at a loss to know how to get one. She asked Siva to produce a man who could make one, and Siva ordered his riding-ox, Vrishábam, to produce such a person by chewing. Vrishábam complied, and the ancestor of the Médaras being informed of the goddess' want, took the serpent which formed Siva's necklace, and going to a hill planted its head on the ground. A bamboo at once sprung up from the spot, which, after returning the snake to its owner, the man used for making a winnow. The snake-like root of the bamboo is regarded as a proof of the truth of this story.

In North Arcot there are many Médaras, chiefly living in the large towns or in villages near bamboo-covered hills. Both sexes work together. In their manners they resemble other Sudra castes, and are usually considered a respectable class. Telugu is their ordinary language.

Korava, Telugu; *Koracha*, Tamil.—These people are said to have the same legend about their origin as the Médaras have, but are greatly looked down upon by the latter. Most of them are very degraded in their manners: possibly they are an illegitimate branch of the Médaras. They speak a mixture of Telugu and Tamil, and usually itinerate, trading in salt, drugs and other goods, which they carry upon donkeys or bullocks. Besides this the women weave mats and baskets, and the men pilfer. They are a black, uncivilized set, with strange customs regarding the sexes, selling or pledging their wives and unmarried daughters, taking them back upon redemption of the pledge, with any children born in the interval, and treating them as though nothing peculiar had happened. They are professed thieves, and when any male is sentenced

to imprisonment, the wife selects another partner for the period of her husband's absence, going back to him on his release with all her children, who are considered his. This, however, is only the case with the Káttu Koravas who wander about the country. Many of the caste have become more civilized and live in villages, being known as Úr (village) Koravas. They have no association with their ruder brethren, and live by cultivation or trade, while their women are the tattooers of the country.

There are three sub-divisions in the caste, viz., Uppu, Debba and Mucchu or Shikári Koravas. The first trade in salt and the women sell curry leaves, the second like Médaras work in bamboo, and the third generally barter jungle produce. Of these the Mucchu Koravas are perhaps the most criminal, though there is not much to choose between them. They have few restrictions as to food, eating mice and cats, but not dogs. Each gang has a headman, and marriage is usually confined to the gang. Burial and not cremation is practised. The name is by some said to be connected with the Tamil word "Kurei" (low) and by others with "Kurincha" (confined), because they live chiefly in the confined space near hills.

Irula.—This is a jungle tribe, many members of which have deserted their forest haunts and taken to agriculture in the neighbouring villages, but the majority still keeps to the hills, living upon roots and wild animals, and bartering forest produce for a few rags or a small amount of grain. When opportunity offers they indulge in cattle theft and robbery.

The Irulas ordinarily speak Tamil, but use words among themselves which appear to have some connection with Canarese, and it seems probable that they are representatives of Kurrumba refugees, who took to the hilly country of Tóndimandalam after their overthrow by the Chólas. They much resemble the Yánádis, who, however, being found in the more northern forests, talk Telugu with a little bad Canarese. The name Irula is supposed to be connected with the Tamil word "irul," darkness, and to refer either to the darkness of their complexions, or the fact of their living in dark, secluded places.

The Irulas appear to have no divisions among themselves, and disclaim with scorn any connection with the Yánádis, whom they hate. Their aversion is such that they will not even allow a Yánádi to see them eating.

They offer worship to the Sapta Kannikas or seven virgins, or to a single deity called Kanniaman, whom they represent in the form of an earthenware oil lamp, which they often place under the Bandári, a tree regarded by them as sacred. These lamps are made by ordinary village potters, who, however, are obliged to knead the clay with their hands and not with their feet. Sometimes they place these representations of their goddess in a secluded cave, but wherever they may place them, no Pariah or Yánádi can be allowed to approach. The chief occasion of

worship, as with the Kurrubas and Yánádis, is at the head-shaving ceremony of children. All children at these times who are aged less than ten years are collected, and the maternal uncle of each cuts off one lock of hair, which is fastened to a rági tree bough.

They rarely contract marriages, the voluntary association of men and women being terminable at the will of either. The more civilized, however, imitate the Hindu cultivating castes by tying a gold bead, strung on a thread, round the bride's neck, but the marriage tie thus formed is easily broken. They always bury their dead, and on the second or third day sprinkle milk and boiled rice over the grave. This too appears to be in imitation of the Hindu castes.

A few Irulas are credited with supernatural powers, and are applied to by low Sudras for advice. The ceremony is called "suthi" or "rangam." The medium affects to be possessed by the goddess, and utters unmeaning sounds, being, they say, unconscious all the while. A few of his companions pretend to understand with difficulty the meaning of his words, and interpret them to the inquirer.

The Irulas never allow any sort of music during their ceremonies, nor will they wear shoes, or cover their body with more than the scantiest rag. Even in the coldest and dampest weather they prefer the warmth of a fire to that of a cumbly. They refuse even to cover an infant with a cloth, but dig a small hollow in the ground, and lay the newly born in it upon a few leaves of the Bandari tree.

Yánádi.—This caste is divided into two classes, the frog-eaters and the non-frog-eaters, of whom the second is alone found in this district, the first being confined to Nellore, and much looked down upon by the Yánádis of North Arcot, who will not even suffer them to touch their pots. Of course they do not eat together or intermarry. In this district, however, the caste does not scruple to eat rats, squirrels, and other small animals found in the woods. They are very primitive in their habits, living entirely in the jungles, where they collect firewood, roots, barks, honey, &c. Their ordinary food consists of roots, fruits and honey, and when they kill game, they merely burn or scorch it and consume it more or less raw.

Much in the Yánádis' ways and customs connects them with the Kurruba caste. Their language appears to be a very corrupt Canarese, degenerated most probably by separation from other Canarese tribes for generations. They are divided into gangs of about 200 or 300, each with a headman, but all the gangs worship one deity known to them as Chentsu. This calls to mind the not dissimilar jungle tribe of that name found in the Kurnool forests. It appears very probable that their deity was some renowned ancestor, now deified in the same fashion that the Kurrubas have deified their ancestral heroes. Chentsu is worshipped under the form of a handful of clay squeezed and put upon a small platform of earth under an árika tree, which they consider as sacred. The lump of earth is sprinkled with turmeric powder and offered

flowers, leaves, and cooked or soaked rice, but this ceremony is only performed once a week, on Friday, by the very pious, and the ordinary Yánádi worships at no other time than at marriages, funerals, soothsayings, and the head-shaving ceremony of children. At this last ceremony the assembled guests eat the rice, and then the maternal uncle of each child cuts off one lock of hair and ties it to a bough of the árika tree. For this he is given two annas and a yard of cloth, and the head is then clean shaved. The children are next taken to a spot dedicated to the goddesses Ankamma and Polérамma, about whom the Yánádis know nothing except that they were not originally worshipped by the tribe. To these goddesses a fowl is offered, the only instance of animal sacrifice in the caste. During the worship of Chentsu all the devotees abstain from animal food, and take only one meal of roots or fruit in each day. On the evening of the shaving ceremony they light torches and indulge in wild dances around a tall pile of leaves and flowers which they set up in some open spot in the forest.

The same sort of worship takes place at marriages, which are only contracted by adults. The bridegroom approaches the bride, and placing his right foot upon her right foot, ties a "bottu" around her neck. Then each pours a handful of rice upon the other's head three times, and the ceremony is complete. It has, however, no binding force, and is often or generally dispensed with. Husbands or wives may desert one another whenever, and as often as, they please without suffering in reputation. Caste discipline is very lax, excommunication or fining being altogether unknown. Like the Nílgiri Kurrumbas the Yánádis are regarded as possessing magical powers, and are often applied to for fortune-telling, spells, and such exercises of their power by members of the lower castes. The act of soothsaying is called "rangam pettédi." The soothsayer kindles a fire before a "Chentsu," to which he offers flowers and leaves but not rice. Then he and his wife sit on opposite sides of the fire, and the husband drumming upon a drum, pretends to be inspired, and sings a song in praise of his deity, the wife chiming in with a chorus. He then predicts in song the good or bad fortune of the person who has applied to him. How their other magical performances are carried out, and to what extent, it seems difficult to learn.

The Yánádis both bury and burn their dead, but the former was probably the original custom. Early on the following morning cooked rice is offered to the shade of the deceased at the spot of burial or cremation, and is eaten by those present. On the eighth day a lump of clay is put up and worshipped with flowers, leaves, and rice, and the assembled people dance round it. The clay on this occasion, however, represents not Chentsu but the deceased, another argument in favour of considering the Yánádi deity to be one of their ancestors. The dance and feasting upon the rice last all night, and early next morning all the assembled relatives go home and bathe.

They are a simple people and naturally truthful, but without much

affection even for their children, who are made to shift for themselves as soon as possible. They are very timid and extremely selfish, the result of their hard life, in which each man and woman finds it difficult to obtain means of subsistence for himself or herself without being burdened with the duty of providing for another.

Some consider that the Irulas are a branch of the Yánádis, who have separated and taken to the more southern country. It is by no means improbable that this is so.

Mádiga, Telugu; *Chakili*, Tamil.—The occupation of this caste is leather working, in which they had the monopoly until the Mahommedans and Labbays appeared upon the scene. Whether they or the Pariahs are the lowest is a subject of dispute between the two classes, but by others they are considered as about equally low, and not caste people at all, and are not therefore allowed to ascend the Tirupati hill, enter the portico of a pagoda, or walk in the streets of a Brahman village. The Mádigas will not take food or water from Pariahs, nor the latter from the former, a prejudice which is taken advantage of in the Kálahastri Rájah's stables to prevent theft of gram by the Pariah horsekeepers, the raw gram being sprinkled with water by Mádigas in the sight of the Pariahs.

The caste is divided into Telugus and Tamilians, but originally the language common to all seems to have been Telugu, while that of the Pariahs was Tamil. Other divisions are three in number, viz., Chintádu, Malten, and Takkali. All of these can eat together but not intermarry. Their caste disputes are usually referred to a head man called Náttan, of the Palli caste. Their only tradition refers to one Arundháti, a Mádiga maiden, whom, they say, the rishi Agastayya considered fit to be his wife. Proud of this distinction, the cobblers often call themselves Arundháti's caste. They are very filthy in their habits, eat almost anything, and drink to excess. A widow may not remarry, but can live in concubinage without any disgrace. At marriages the bridegroom has to provide thirty-five new pots and a sum of Rupees 5, which is spent in drink consumed by the guests. The ceremony is performed by their own priests, for no Brahman will approach their haunts. They are the drummers and horn-blowers of their village, their horn being called 'bánkha' and their drum 'thappatei,' but their main occupation is tanning and leather working, and they usually claim the privilege of taking free of payment the hides of all animals dying in the village, and are not always above increasing the death-rate by means of poison.

Pariah, Tamil; *Mála*, Telugu.—This caste is very largely represented in the district, forming 20 per cent. of the population. Most of them are Tamilians, but a few Telugus are found in the northern taluks and among the domestic servants of Europeans and East Indians. The Tamilians have three divisions, Thangalam, Vellam, and Konga, of which the first is the highest, and the last not largely represented. The Vellam Pariahs are those who do scavengering work, which the Thangalams refuse to do. Both Vellams and Konga Pariahs eat cows that have died

a natural death, while Thangalams only eat such as have been slaughtered. The Thangalams profess to have once been a very respectable class and still wear the thread at weddings and funerals, while the other divisions never assume it. The Thangalams are sometimes called Mariáhs in consequence of the following story. A certain serpent lived in an ant-hill in a forest, and used to drink the milk of a cow created by the swámi for its support. At last the cow died and the swámi ordered the ancestor of the Thangalams to cook food for it. While he was doing this the swámi turned aside, and the Thangalam took the opportunity of stealing a morsel of flesh, but the swámi perceived his action and cried Mariáthé (do not conceal). For his misconduct he and his descendants were doomed to perpetual degradation.

Among the lower class of Vellam Pariahs, who are the village toties, the following legend is current, accounting for the perquisites which they get for performing the menial work of the village. When Ádi Sésha was supporting the earth, he became weary and prayed to Siva for assistance. Siva ordered a Pariah to beat upon his drum and cry "let the ripe decay." The Pariah enquired what should be his reward, and was granted the following privileges, viz., man kúli (reward for burning corpses), sám tuni (the cloth with which the corpse is covered), váyuk-karisi (the rice in the corpse's mouth), punda shóru (boiled rice), and shúttu kúli (fee for bringing firewood). This seemed to the Pariah very little, and so to increase the death-rate and consequently his perquisites, he cried "let the ripe and the unripe decay." The swámi remonstrated with him, for the result of his cry was that children and the middle-aged among men died. The man pleaded poverty, and was given four additional privileges, viz., a merkál to measure grain, a rod to measure the ground, a scythe to cut grass, and the privilege of carrying the karagam-pot when annually running over the village boundary. All the above privileges still belong to the village Vetties, who receive fees for performing the duties referred to in the legend.

Among the Telugus there are four divisions, of which the highest, which corresponds to the Thangalam Pariahs, is that of the Reddi Boyi Málas, who only eat slaughtered cows. The Boyi Málas are the next, and eat cattle that die from disease, as do the Pákanáti Boyi and the Murrikináti Boyi Málas. The last named are the lowest, performing scavenger's work and corresponding to the Vellam Pariahs among the Tamilians.

The members of all these classes marry only among themselves, and will not eat with others, except the Reddi Boyi and the Boyi Málas, who seem willing both to intermarry and to eat together. Both Telugus and Tamils bury their dead. At their marriages no religious service takes place, but guests assemble, the priest sings songs to an accompaniment upon a drum, and some of the guests dance. When the auspicious moment arrives, the bridegroom ties the táli to the bride's neck, while all his friends clap their hands loudly. The shape of the táli used by the Telugus and the Tamilians differ. Among the Telugus both bride and

bridegroom have a piece of string tied round their right wrists. Their priests are called Valluva, Thádar, Pandáram, and Sanjívi. Some of these do not eat meat, but will accept rice and eat it.

The Telugu classes nominally worship Vishnu and the Tamilians Siva, but really they worship the female deities called Máriátha, Káli, Ponniammál, and Mandiammál, in whose little temples they offer rice, flowers, turmeric, &c. Very many Pariahs have become Christians of late years, and these of course only marry among themselves.

The Tamil name Pariah is said to be connected with the word "parai," a drum on which they perform. The term Mála seems to have no particular significance.

Mussulmans.—These number rather more than 60,000, the greater proportion being found in the taluks of Arcot, Gudiyátam, and Vellore. Almost all are in religion Sunees, recognizing the succession not only of Ali, but of Usman, Ummer, and Abu Bakker as well, and admitting traditions. As a class they are ignorant, poor, and idle, but a few are successful and wealthy traders. The common occupation of the lower orders is petty trading or service as sepoys, constables, and peons. More than half of their number are, or call themselves, Shéyks; of the rest 10,000 are Syuds, 6,000 Pátans, and 1,200 Moghuls.

Labbay.—These are upwards of 25,000 in number, all of them engaged in trade of some sort. By the Mussulmans they are looked down upon as the offspring of men of their caste by Hindu mothers, and doubtless many of them are of such descent. Some of the Labbays, however, assert that, like the Moplahs of the western coast, they are the descendants of trading Arabs by Hindus. The Nevávets (a very respectable section of Mussulmans) believe that the Labbays are the offspring of the Abyssinian slaves whom their ancestors brought from Arabia about a thousand years ago. The name is clearly of Arabic origin, being a corruption of Labbaik, "here I am," the exclamation of a servant when called by his master, and this corroborates the Nevávets' account. They are very particular Mahommedans, and many belong to the Wahábí section. Adhering to the rule of the Koran, most of them refuse to lend money at interest, but get over the difficulty by taking a share in the profits derived by others from their loans. They are, as a rule, well to do and excellently housed. The first thing a Labbay does is to build himself a commodious tiled dwelling, and the next to provide himself with gay attire. In dress they resemble the Hindus, but wear a peculiar fez-like cap made of coloured grasses. They seem to have a prejudice against repairing houses, and prefer letting them go to ruin and building new ones. The Mussulmans appear to entertain similar ideas on this point.

CHAPTER VI.

INDUSTRIES AND MANUFACTURES.

GRICULTURE.

THIS is the chief industry of the district, occupying the whole or part of the attention of fully 75 per cent. of the people, and yielding, except in years of famine, not only food sufficient for the entire population, but also a large surplus for export.

A great proportion of the agricultural population are not themselves holders of land, but serve for wages, or cultivate the lands of large holders on condition of sharing the produce. Statistics showing the actual number of tenants are not available for the zemindari estates, but for the ryotwari taluks the following statement has been prepared :—

Amount of Puttah.	1856-57.		1861-62.		1866-67.		1871-72.		1877-78.	
	No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.
		Rs.		Rs.		Rs.		Rs.		Rs.
Under 10 Rs. ...	75,222	2,88,433	107,275	3,75,927	89,205	3,11,236	125,834	4,65,578	156,006	3,45,263
From 10 to 30 „ ...	32,837	5,33,550	35,213	5,79,419	24,878	4,17,249	39,528	6,59,787	31,611	4,29,799
From 30 to 50 „ ...	8,840	3,37,261	7,360	2,75,258	4,932	1,80,578	9,361	3,39,014	5,729	1,88,966
From 50 to 100 „ ...	5,455	3,50,758	3,590	2,33,714	2,191	1,41,486	4,757	3,10,279	2,554	1,54,400
From 100 to 200 „ ...	1,516	2,06,400	759	1,03,279	506	69,852	1,088	1,45,550	499	64,241
From 200 to 250 „ ...	132	40,465								
From 250 to 500 „ ...	13	8,044	48	15,569	24	7,879	92	29,057	20	8,242
From 500 to 1,000 „ ...	...	...	11	8,238	2	1,211	13	8,078	5	3,022
Upwards of 1,000 „ ...	...	...	...	...	1	1,176	...	...	...	...
Total ...	124,015	17,74,811	154,256	15,91,404	121,739	11,20,667	180,693	19,57,943	1,96,424	11,23,933
Single	100,869	12,87,802	119,968	10,97,743	121,739	11,20,667	130,196	12,19,559	119,502	6,63,057
Joint	23,146	4,93,009	34,288	4,93,661	39,645	6,08,348	50,497	7,38,384	76,862	5,30,876

From this it is apparent that the number of holders of land under Government has been steadily increasing, and within the last thirty years has nearly doubled, though the area under the plough has not increased in anything like the same proportion. It therefore follows that each ryot's holding is on an average smaller now than it used formerly to be. This appears very clearly from a comparison of each class of puttahs, the number paying to Government between Rupees 500 and Rupees 1,000, and between Rupees 250 and Rupees 500, having, since 1860, fallen from 11 to 5 and from 48 to 20 respectively, while puttahs paying less than Rupees 10 have been more than doubled since 1856. Of the 196,424 puttahs held in 1877-78, no less than 76,862 stood in the names of two or more persons jointly, and many of these have no doubt divided their common property without taking the trouble to apply for separate puttahs. In all probability the number of independent tenants under Government in the ryotwari taluks does not fall far short of 225,000. Taking, however, the actual number of puttahs held singly and jointly, it appears that the average extent of a holding is $3\frac{1}{3}$ acres, and its assessment slightly over Rupees 9. Of the land in occupation only a third is irrigated: the assessment for irrigated land amounts to Rupees 5-11-1, and for unirrigated to Rupees 1-6-2, not a large proportion to pay out of the value of the gross produce yielded. In anicut-fed villages the assessments are at present ridiculously low and might well be doubled.

For means of irrigation the ryots of North Arcot are fairly well off, since the Government taluks contain the following:—

Taluks.	Tanks.	Channels.	Wells.	Remarks.
Chandragiri	97	208	?	
Chittoor	720	307	10,052	
Palmanér	624	58	415	
Gudiyátam	116	229	2,998	
Wálájá	486	75	9,405	The number of wells is certainly understated.
Arcot	488	172	7,952	
Vellore	112	122	9,733	
Wandiwásh	561	16	6,452	
Pólúr	316	34	?	
Total ..	3,520	1,221	49,007	

There are two principal cultivating seasons, each depending mainly upon one of the two monsoons which affect the district.[1] The first, or south-west monsoon, sets in early in June, but previous to this there have generally been light showers towards the end of March and in April, often followed by a good downpour in May, the result of cyclonic disturbance at the period of the change of the monsoons. The early showers are utilized for ploughing up the moistened soil, and in May, if rain enough has fallen, or in June the dry crops are put down after a heavy shower. The commonest of these are rági, kambu, varagu, and gingelly. Should the rains be late, the cultivating season is delayed until July or August, with the result usually of an indifferent outturn. Even in a good year all the land is not sown so early as May or June, but part is gradually brought under crop up to the end of July.

As soon as wet lands have been thoroughly soaked by irrigation, or sometimes by rain alone, they are usually ploughed and manured, and the ploughing is continued at intervals until the tank upon which they depend has received a fair supply of water, when seeds are sown or transplantation effected, first in the low-lying fields, and when sufficient

[1] The following table shows the rainfall during the last ten years, as distributed among the months :—

Official Years.	January.	February.	March.	April.	May.	June.	July.
	Inches T.	Inches T.	Ins. T.	Inches T.	Inches T.	Ins. T.	Ins. T.
1869 ..	..	..	0·57	0·52	1·08	1·56	4·0
1870 ..	0·85	..	0·34	0·08	0·70	3·66	2·90
1871 ..	1·36	0·35	2·53	0·48	3·54	1·79	3·27
1872 ..	..	0·07	..	0·07	9·11	1·09	3·38
1873 ..	..	5·75	..	0·96	0·77	1·33	3·80
1874 ..	..	..	0·13	..	9·61	5·23	2·40
1875 ..	0·32	..	0·22	0·18	2·32	2·10	5·73
1876 ..	..	..	0·10	0·22	2·22	3·27	2·22
1877 ..	..	0·01	1·08	0·41	4·48	2·88	1·78
1878 ..	0·01	..	0·05	1·68	2·95	5·49	0·91
Average ..	0·25	0·61	0·50	0·46	3·67	2·85	3·40

Official Years.	August.	September.	October.	November.	December.	Total.
	Inches T.	Inches T.	Inches T.	Inches T.	Inches T.	Inches T.
1869	2·20	4·40	5·77	2·91	0·09	23·10
1870	3·77	7·38	1·43	3·35	2·89	27·35
1871	5·74	4·56	11·36	2·13	0·81	37·92
1872	2·19	9·59	5·10	12·88	0·48	43·96
1873	6·78	3·69	6·90	13·69	2·81	46·48
1874	10·95	7·05	8·76	1·90	1·46	47·49
1875	2·49	16·75	11·41	2·95	1·22	45·69
1876	9·30	3·40	3·55	1·30	1·25	26·83
1877	1·47	2·20	0·42	0·89	..	15·62
1878	2·42	10·39	9·93	4·89	1·76	40·48
Average ..	4·73	6·94	6·66	4·69	1·27	35·50

water is assured, upon the high levels. The dry crops take from three to six months to mature, if planted early; therefore, many of them are off the ground before the north-east monsoon sets in towards the end of October. Others are matured by this monsoon, and reaped about November or December.

The chief cultivating season is that of the south-west monsoon, which on an average contributes 60 per cent. of the annual rainfall and supports two-thirds of the crops raised in the district. The rains at this time are not very heavy, but are well distributed. A typically good season is one in which the soil gets a good drenching once in fifteen days, after a good burst for the sowing time.

In September the gram cultivation is begun after a fair shower of rain, and the crop has made a good start by the time the north-east rains burst upon the district. These rains last through November into December, and furnish about a third of the yearly supply. They are so heavy that much is unabsorbed by the soil and passes off through water-courses into the tanks, so that by November all reservoirs are generally full. From November to January the cold weather paddy crop is got into the ground everywhere, the extent under rice being larger at this period than at any other time of the year. Garden crops of chillies, tobacco, and vegetables are also now raised, and a second crop of rágі or cholum is sown. After the beginning of December rain seldom falls, but the night dews are heavy, bringing the gram to maturity in January, and invigorating all the other crops, which are reaped as they ripen up to March.

Such is the ordinary course of cultivation in North Arcot, slightly varied in different taluks according to their circumstances. It is but seldom that both monsoons are good; ordinarily one or other of them is more or less unfavourable by reason of deficient, excessive, or untimely rains, and the effect varies with the nature of the soil and the crop upon it. In the sandy taluks of the south-east excess produces little harm, while a large deficiency is fatal; and on the other hand, in clay soils retentive of moisture, a moderate drought is easily tided over, but excessive rain produces disease and blight.

Much of the action of the ryots is based upon superstition, and is in accordance with certain fixed rules which have been handed down through many generations. To some extent they are no doubt the result of long experience, and it is sometimes surprising to see how successful the people are in making a forecast of the season. A great deal of their lore can, however, be regarded as nothing more than superstition pure and simple.

Time is, for cultivating purposes, divided by them into periods of twenty-seven days, each named after one of as many stars, which are considered each to rule its particular day. The names of these stars and days in their order are—

No.	Tamil.	Telugu.	No.	Tamil.	Telugu.
1	Aswani	Aswani.	15	Swáthi	Swáthi.
2	Bharani	Bharani.	16	Vysakha	Vysákha.
3	Krithiga	Krithiga.	17	Anusham	Anurádha.
4	Róhini	Róhini.	18	Kétté	Jyésta.
5	Mrugasira ..	Mrugasira.	19	Múlam	Múlam.
6	Tiruvadarai ..	Arudra.	20	Pundam	Purvásháda.
7	Punarpusam ..	Punarvasu.	21	Uttarádam ..	Uttarásháda.
8	Púsham	Pushyami.	22	Tiruvunam ..	Shravanam.
9	Ayilium	Ashlesha.	23	Dhanishta ..	Dhanishta.
10	Magha	Magha.	24	Sathabisham ..	Sathabisham.
11	Puram	Pabba.	25	Purattádhi ..	Purvabhadra.
12	Uttara	Uttara.	26	Uttaratádhi ..	Uttarabhadra
14	Hasta	Hasta.	27	Révathi	Révathi.
13	Chitta	Chitta.			

The year is similarly divided into twenty-seven periods, called kártis, named after the same stars.

The twenty-seven days contain three periods of nine days each, one set apart for the sowing of cereals, another for roots, and the third for pulses, and except within their proper periods these crops are never sown; nor are they upon a Saturday or Sunday. The period for cereals runs from the twenty-second day to the third, for roots from the second to the tenth; and for pulses from the fifteenth to the twenty-third, all inclusive: thus there are four days, from the eleventh to the fourteenth, considered unfit for sowing operations. The day Krithiga is also regarded as of evil influence, being ruled by fire; the kárti of Krithiga occurs about April or May, the hottest season of the year, which may be one reason for the idea. On the Krithiga day of the month Kárthiga, it is the practice to light bonfires on every commanding peak, and it is regarded as an evil omen should rain not fall and extinguish them.

The month Chittri (April-May) is, with reason, considered a very favourable season for ploughing, and the operation at that time is called the "golden" plough (ponnér); but in this month the most auspicious days are those of the waxing moon (excepting Saturdays and Sundays), the 9th of the month, and all the even days. Róhini, Múlam, Uttaram, Révathi, Púsham, and Hastam are, among auspicious days, the most auspicious for ploughing.

On the subject of rainfall the following beliefs are held. If it should rain on the 10th of Áni (June), 8th of Ádi (July), 6th of Ávani (August), 4th of Peratási (September), 2nd of Alpisi (October), or 1st of Kárthiga (November), seasonable rain is likely to fall during the succeeding season. Of these days the two first mentioned are the most important, and if rain should not fall on them prices at once rise. On the 6th of Ávani there should be thunder and lightning with the rain, or the ryot's mind is not at rest. The hour at which the rainfall occurs on these days is further thought to foretell the character of the month itself, for if it should be in the forenoon, the whole month is

expected to be rainy, but if in the afternoon only the latter half of it. After Kárthiga rain is not generally expected, but it is possible that it may fall up to the last day of the kárti of Múla (December-January), though it is not desired, for at that time it is likely to cause blight in the flowering pulses.

The direction of the wind on the Uttarádam day of Ádi is anxiously noted by every ryot, and when the breeze is light, fires are lit that their smoke may show the direction. Should it be towards the east there will be rain in the north-east monsoon, if towards the south-west there will be good rains at that time, if towards the north-west the early rains will be favourable; but if towards the south or south-east drought and famine may be expected. Thus a Telugu proverb runs "Uttara tsúchi; yetthu rá gampa," *i.e.*, if you see a north wind, carry off your basket.

Many other proverbs are current regarding weather signs. The commonest among the Tamilians are:—

"Thúra mandalam: shéra marei.
Shéra mandalam: thúra marei."

i.e., a distant halo round the moon betokens speedy rainfall; but a halo close around her shows that rain is very distant.

Another recalls a common proverb in England:—

"Kálé shemmánam: kaduga marei.
Anthi shemmánam: arudálum marei illé."

or

"Red sky in the morning means speedy rain.
Red sky in the evening means none though you cry for it."

When lightning is seen in the north-west of an evening it is regarded as a sign of rain: thus they say "Kodiya kálil minnel; vidia kálil marei." Other proverbs refer to fowls or kites flapping their wings towards the sun, flights of butterflies passing to the south, and ants carrying their eggs to a high and dry spot as prognosticating rainy weather; but perhaps the most curious superstition on this subject is one relating to a period of 14¾ days, being the kárti of Pundam, ruled by Varuna, the god of rain, beginning from 6 p.m. on the 14th of Margali (January), when the presence or absence of clouds coming from the north is anxiously watched for and noted. Should they be seen

between	6 p.m.	on the	14th	and	6 p.m.	on the	15th	there will be rain in the month of	Márgali (Dec.-Jan.)
,,	6 p.m.	,,	15th	,,	11 p.m.	,,	15th		Thai (Jan.-Feb.)
,,	11 p.m.	,,	15th	,,	4 a.m.	,,	16th		Másí (Feb.-March.)
,,	4 a.m.	,,	16th	,,	9 a.m.	,,	16th		Panguni (Mar.-April.)
,,	9 a.m.	,,	16th	,,	2 p.m.	,,	17th		Chittri (April-May.)
,,	2 p.m.	,,	17th	,,	6 p.m.	,,	17th		Vyásí (May-June.)
,,	6 p.m.	,,	17th	,,	6 a.m.	,,	19th		Áni (June-July.)
,,	6 a.m.	,,	19th	,,	noon	,,	21st		Ádi (July-August.)
,,	noon	,,	21st	,,	6 p.m.	,,	23rd		Ávani (August-Sep.)
,,	6 p.m.	,,	23rd	,,	midnight	,,	25th		Peratási (Sep.-Oct.)
,,	midnight	,,	25th	,,	6 a.m.	,,	27th		Alpisi (Oct.-Nov.)
,,	6 a.m.	,,	27th	,,	noon	,,	29th		Kárthiga (Nov.-Dec.)

If a halo be observed round the moon between 6 and 10 p.m. on the full moon day of Ádi, it is believed that good rain will fall in Kárthiga; and if one be seen between 2 a.m. and 6 a.m. on that night, Márgali is expected to be wet. A good year for mangoes denotes a bad cultivating season; but a plentiful crop of tamarinds signifies the reverse: thus they say

"Mangam kálam, máng káy. Pongam kálam, puliang káy."

A rainbow in the east in Áni, Ádi, or Ávani is supposed to be a sure sign of impending famine; but lightning in the east on the Swáthi day of Alpisi foretells good times. In Panguni and Chittri, if the moon when three days old (then called 'pirai') should rise a little south, during the next eight months a little north, and in Thai and Másí due east, the rains will be good, but if not, there will be distress, is a belief expressed in the following Tamil stanza:—

"Mínádúm therkósara: Mikkeṭṭúm vadakósara: Thaiyúm, Másiyum sariága."

Such are a few of the beliefs regarding weather signs. They are widespread and implicitly believed, influencing the ryot's actions very powerfully.

In some years blight and insects do much damage to the growing crops, and various remedies are adopted to remove them. When rági suffers from rust it is usual to burn pig's dung to windward of it, and the smoke, passing over the crop, is said to remove the disease. Cholum often suffers from smut, to remove which sacrifices and offerings of rice (pongal) are made to the village goddess, usually on Sundays. The chief insects that do damage are grasshoppers, caterpillars, and some small midge-like flies called anthu púchi and anna púchi, which are variously treated. Sometimes ashes, dung water, or the blood of a fowl or sheep slaughtered in sacrifice close to the crop, are sprinkled over the plants; or fires are burnt close by or pongal is offered. Grasshoppers are often kept away by thorns strewn about the crop, or rice mixed with chunam and saffron is sprinkled over it. Many spells are also used: thus in part of the south of the district, after pongal, three pieces of palm leaf are thrown on three sides of the field, omitting the south, in which direction Tiruvannámalai lies. In the Vellore Taluk many ryots go to some temple of Byravaswámi with grain, which they present to the idol, and taking half as much earth from the temple enclosure, as they brought grain, carry it home and sprinkle it over their blighted fields. Above the ghauts mildew is said to be successfully removed by placing the leaves of a sort of palm called "parita" in the channel along which water flows to the fields. Each taluk seems to have modes of its own for removing such pests, in addition to the common ones of making pongal and sacrifices.

The question of the average yield of the district is one about which it is difficult to get satisfactory evidence. Upon the character of the season

depends, to a very great extent, the amount of produce, which in a good year is probably nearly double what it is in a bad one. As ryots' memories are short, their powers of observation dull, and their minds very suspicious, their statements cannot be relied upon. While one intelligent headman in Palmanér has positively declared that he has harvested nearly 10,000 lb. of paddy from a káni (1⅓ acre) of first-class land, others have gone so far as to assert that 2,500 lb. is the utmost ever reaped there, and 1,500 lb. the average. The estimates of well-informed Tahsildars are found to vary between extremes almost as wide, and the subject is therefore left in doubt, except in so far as the experiments of the Revenue Settlement Department, added to some carried out by taluk officials, throw light upon it with regard to wet lands in three taluks—Chandragiri, Chittoor, and Gudiyátam. During a period of three years the Revenue Settlement Department made 746 experiments in these taluks, which are among the more fertile in the district, upon good, middling, and indifferent soils. The results are shown below:—

—	Experiments.	Average yield of Paddy.	Average yield of Rice.
		LB.	LB.
Good soils	367	3,011	2,002
Middling soils	186	2,185	1,457
Indifferent do	193	1,530	1,020
Total ..	746	2,421	1,614

In the same taluks the Tahsildars' experiments produced the following results, but the character of the soils was unfortunately not noted :—

—	Experiments.	Average yield of Paddy.	Average yield of Rice.
		LB.	LB.
Chandragiri Taluk	395	3,028	2,019
Chittoor do.	650	2,686	1,791
Gudiyátam do.	272	2,214	1,476
Total ..	1,317	2,693	1,706

This shows how the yield of different localities differs. Chandragiri is certainly more fertile than Chittoor, and Chittoor than most of Gudiyátam. Wandiwásh, Arcot, Arni, and the east of Pólúr are inferior to any of these three, though excellent irrigation probably brings up the average of Wálájá for wet lands to a respectable figure.

Of Chandragiri, Gudiyátam, and Chittoor Mr. Rundall, the Deputy Director of Revenue Settlement, writes thus, comparing them with Nellore:—

"The yield is nearly double that of Nellore, being 1,796 lb. of rice against 933 lb. in that district. The difference I attribute to the much higher state of cultivation pursued in North Arcot, the land being invariably well manured, partly with ordinary manure, but mainly with leaves carted from the neighbouring hills and jungles, and applied at the rate of about ten cart-loads (800 lb.) per acre. Throughout the extensive tracts of irrigated land in Nellore the cultivation is comparatively poorly conducted, the holdings being often much more extensive than the ryots can cultivate well. Leaves, too, are not available as a rule, but even where they are, they are not used to the same extent as in North Arcot, where the holdings run much smaller. The produce returned for North Arcot is moreover the produce of a single crop, while a large proportion of the wet land is generally double crop, and under the better sources of irrigation two crops of paddy. The yield of each crop varies somewhat, the early or kar crop being generally the heavier of the two. The experiments given include experiments of both crops. The double crop land is invariably good, and the annual produce will certainly not be less than 3,600 lb. of rice, or upwards of a ton and a half per acre."

This may be considered as applicable not only to the three taluks referred to, but also to the country above the ghauts, to Vellore, the west of Pólúr, and the Kárvetnagar Zemindari; but the last-named division is rather more fertile than any other part of the district. The rest probably more nearly resembles Nellore in the amount of grain yielded, for jungles are absent, except in parts of Kálahastri, and consequently green leaves are not available for application to the soil, nor pasture lands for much cattle. The big anicuts rescue many villages in Wálájá, Arcot, and Wandiwash from great poverty, and increase the proportion of land under paddy, thus producing much straw upon which the better sort of cattle are fed. Taking the whole district it may be safely estimated that the wet crops on an average, taking single and double together, yield about 2,000 lb. of rice per acre. For dry crops no experiments have been made or at least recorded, and estimates formed by different natives vary as widely as those for paddy. Comparing the latter with the results of actual experiments, and applying the experience thus gained to various estimates made for dry crops, the outturn would appear to be—[1]

[1] Mr. Rundall considers these estimates to be very excessive and writes: "For ordinary dry cultivation, not irrigated from wells, I should be disposed to estimate as follows:—ráji 336 lb., kambu 370 lb., cholum 377 lb., varagu 430 lb. The first three crops are grown under wells, and the yield I should then set down at from 2½ to 3 times the produce of ordinary dry." No information is however available as to the irrigable area under wells, but certainly not more than 10 or 15 per cent. of the occupied dry land can be taken as such. Mr. Rundall's estimate would be about two-thirds of that given above, but it is impossible to be certain at present upon the subject as no experiments have been made.

	Lb. per Acre
Rági about	700
Kambu do.	600
Cholum do.	600
Varagu do.	600
Samé do.	500
Dholl do.	400

There can be no doubt that the district does more than support itself, for in 1875, an ordinary year, the export by rail alone of food-grains exceeded the imports by 40,000 tons. The population being two millions, assuming that each takes 1¼ lb. of grain per diem (which is a low average even taking adults and children together), it appears that 400,000 tons must be annually consumed. Applying the estimated outturn to the average extent cultivated with food-grains, and making a proportionate allowance for zemindaris, we get

400,000 acres of wet land producing 360,000 tons.
500,000 do. dry do. 140,000 do.

or a total yield of 500,000 tons of food-grains, which appears probable.

Upon the subject of the deterioration of land opinions differ, but most ryots hold that there has been a falling off in its productive power. Some say that the yield has decreased owing to bad seasons, which have been common of late years, and not to any weakening of the soil; but others charge the railway, the telegraph wires, and forest clearing with exercising an evil effect. There appears, however, to be no reason to think that there has been any deterioration of the soil which cannot be accounted for by the extension of cultivation and less careful manuring of the soil.

The amount of manure applied per acre varies with the means of the ryot and the peculiarities of his taluk. Above the ghauts it is probably more plentifully used than in any other part of the district except Chandragiri. The ryots of the plateau generally surround their fields with lines of Kánaga trees (*Pongamia glabra*), the bright green leaves of which form an excellent manure, while the faded flowers are still more powerful than the leaves. The seeds, after being pressed in order to extract their oil, yield a cake, which is used with the flowers for sugar-cane gardens. The plateau also supports large flocks of sheep and herds of cattle, and the droppings of these are available for fertilizing the fields. The Kánaga unfortunately is comparatively scarce in the rest of the district, and rare in the south and east. Here ordinary manure, mixed with ashes, is worked into the ground, cattle and sheep are folded on it, and leaves as available are used. For wet lands the dark silt from the beds of tanks is very often employed as well. It is difficult to hazard a guess regarding the amount of animal manure used, but a fair estimate seems to be for

Garden lands	3	to	6	tons per acre.
Wet do.	1½	to	3	,,
Dry do.	0	to	1	,,

The people are keenly alive to the value of manures, and put into the soil as much as they, their children, and womankind can lay hands on. The practice of burning cowdung as fuel no doubt seriously reduces the available supply. In the southern taluks the customary neglect of dry lands is to some extent remedied by the habit of resigning them after one season, allowing them to lie fallow for a year or two, and then taking them up again. There is usually an understanding among the villagers that none shall interfere with this arrangement by applying for the relinquished fields except the ryot who has relinquished them, and if a stranger should make a bid, the preferential right of a resident cultivator meets the difficulty. Rotation of crops on wet lands is unknown except in the case of sugarcane, and to a less extent betel; and on dry lands it is not common, or apparently practised on principle, except with varagu. Fallowing of wet lands is never practised where water is available, but dry lands lowly assessed are not unfrequently allowed to lie waste for a year or so.

To estimate the profits of cultivation is not an easy matter, for ryots either do not know, or will not tell, the value of the items upon which calculations must be based. One of the most ordinary forms of agreement between landlord and tenant is that the latter should pay to the former váram, or a share in the produce. Usually this share is a half, though circumstances may vary the proportion. The landlord receives his half share of the grain, but not of the straw, and pays the assessment due upon the land. The straw and the remaining half share of the grain are considered to be a very little more than enough to cover the expenses of cultivation, and to support the cultivator and his family. This then may be regarded as the actual cost of cultivation. In the case of wet land 2,000 lb. of rice has been taken as an average outturn per acre, and the average price of second sort rice during three years ending 1876 being 34 lb. for a rupee, the average value of the produce of an acre may be fixed at about Rupees 58, and a half of this taken to be the cost of cultivation, the rest being the landlord's profit. According to the returns of the Inspector-General of Registration for 1875, the average price for which an acre of wet land sold in the Government taluks of this district was Rupees 241. About 7 or 8 per cent. is generally regarded as a fair return upon money invested in land,[1] which upon Rupees 241 would be nearly Rupees 20. This sum deducted from the value of the landlord's half share leaves about Rupees 8 or 9,

[1] Money lent on the personal security of people with fair credit brings in from 9 to 12 per cent., but every native loves to possess land, and willingly invests money in it with a smaller return than this. Interest does not seem to have varied since 1839, when the Collector reported that the usual rates were from 9 to 12 per cent. Small ryots generally borrow at ruinous interest, paying, even upon the security of a growing crop, as much as, or more than, cent. per cent., and repaying the debt in grain at harvest time, when the latter is of course cheap. Several District Munsifs assert that in no districts of which they have had experience have such exorbitant rates been prevalent as in North Arcot. This would seem to argue that the ryots are very poor, and many of them doubtless are so. Money is often lent on personal security to persons of doubtful solvency at 36 per cent.

which is a little more than the amount of assessment that he would pay for an average acre of wet land: but it must be remembered that the ryot does not realize the prices quoted which are retail, while he generally sells wholesale.

Pursuing a similar course with respect to dry lands, we get an average outturn of 600 lb. an acre. The average price during recent years has been 50 lb. per rupee, and the average value of the produce of an acre would therefore be about Rupees 12, half of which, or Rupees 6, would represent the cost of cultivation. Out of the other half the landlord has to pay the assessment, which on an average would be about Rupees 1-8-0, leaving Rupees 4-8-0 as the return on his capital invested in land, and at 7 or 8 per cent. this would represent from Rupees 60 to Rupees 70. Referring, again, to the returns of the Registration Department, we find that the average price for which dry land sells per acre has been Rupees 91, which tends to confirm the accuracy of the facts assumed in the above calculations, for only the better sorts of dry land are sold and the sales registered. Much dry land indeed is unsaleable.

Out of produce worth Rupees 58, therefore, the ryot pays to Government about Rupees 6, or a tenth share, for wet land; and out of Rupees 12 worth of dry grains he pays about Rupees 1-8-0, or about an eighth. Applying another test, we may consider the whole outturn of rice for the district which has been taken at 360,000 tons, and of dry food-grains at 140,000. These at average prices represent about 300 lakhs of rupees. But about a sixth part of the cultivated area is nder crops producing products other than food-grains, and these may e valued at about 50 lakhs. The total yield of the district would herefore be worth some 350 lakhs. The land revenue in Government aluks is about 16 lakhs, and the rents paid to Zemindars and others robably not more than 20 lakhs, making the total sum of rent paid bout 36 lakhs, or one-tenth part of the produce, or allowing a deduction n account of wholesale prices, the ryots' share may be taken as about an ighth. As the rent in Government taluks was originally fixed upon the upposition that Government took from a half to a third share, it is hus apparent how largely the ryot in ordinary years benefits from the ncrease in the value of agricultural produce which has come in during he latter part of the century. In zemindaris the assessments of wet nd garden lands are very much higher than in Government taluks, and he result is that the value of such land in the settled estates is far lower than elsewhere. The following comparison exhibits the difference as shown by registration returns :—

Average Price per Acre.	Government Taluks.	Zemindaris.
	Rs.	Rs.
Wet lands	241	107
Garden lands	165	45
Dry lands	91	104

These figures only represent average prices, and some of the most favourably situated wet land, such as that irrigated by the Kávéripák tank, realises as much as Rupees 500 a káni, or nearly Rupees 400 an acre. We have no records of price at the beginning of the century, but know that for several years land had no selling value whatever. In 1830 it was reported that the sale-value of lands was highest in the case of the Tirupati ináms, where it was twenty-five times the annual income (assessment ?), while the average price throughout the district was from five to ten times the income.

The increase in the values of agricultural produce appears from the subjoined comparison, which gives the values of a garce in rupees in various years :—

Fasli.	Paddy, second sort.	Cholum.	Kambu.	Ragi.	Varagu.	Horse-gram.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1215	84	..	..	..	..	..
1255 to 1264 ..	84	123	117	113	..	144
1265 to 1274 ..	134	189	178	173	..	199
1275 to 1284 ..	147	199	185	189	..	239
1278	192	226	203	211	128	225
1280	125	130	125	126	101	154
1282	123	152	138	122	86	221
1284	146	168	169	170	145	276
1286	262	421	415	403	266	431
1287	305	512	427	441	178	533

The value of rice is just double that of paddy.

The two last were famine years. The Madras garce is 3,200 Madras measures of 120 tolas weight, or 85 cwt. The slight variations from month to month are also shown below :—

—	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Rice, second sort.	32·7	32·0	31·6	32·1	32·3	32·8	33·7	35·0	34·9	35·7	35·6	35·6
Ragi	52·2	51·2	51·7	51·8	53·3	52·4	61·9	58·1	60·0	60·8	59·9	55·7
Cholum ..	44·4	45·0	46·4	47·0	49·3	46·6	52·8	55·6	56·3	56·0	52·5	51·3
Kambu ..	47·8	44·2	45·6	44·3	44·3	44·5	50·1	51·5	51·9	54·3	53·6	51·3

All considerable landholders have a certain number of male agricultural labourers, generally Pariahs, permanently in their employ. These are the padiáls already described as originally slaves of the soil. Their wages are always paid in grain, and the amount appears not to have varied since the beginning of the century, the rate continuing to be a kalam of paddy, equal to about 60 lb. of rice, per month, with an old cloth given once or twice in a year, and sometimes a few annas in addition. The padiál and his master however always have a running account for

advances of money made to the former for some special occasion. His allowances are not of course sufficient to support his family, but his wife and children contribute to his means by daily labour. During harvest or weeding time, when extra hands are needed, they find no difficulty in obtaining employment, and receive for a day's labour—women from Annas 1-3 to Annas 1-6, and children from 9 pies to 1 anna; at other times they earn small sums by cutting firewood in the jungles and carrying it to the nearest market, pounding rice, or obtaining other odd jobs about the village. The daily wage of a man, not a padiál, amounts to from Annas 2 to 2½. It would be reasonable to suppose that wages have risen since the beginning of the century, but, if a report made in 1815 is to be trusted, this is not the case. In that year the prevailing rates are given as—

	AS. P.		AS. P.
Men coolies	from 1 10½	to	2 6
Women	,, 1 0	to	1 10½
Children	,, 1 0	to	1 3
Carts	Annas 14 for ten miles.		

In 1839 however higher rates than these were returned, that for a man being Annas 3¾, and women and children in proportion, while cart-hire had gone down to 8 annas for ten miles; it is now paid for at an anna a mile.

The implements of agriculture are very simple. The native plough is cut out of a crooked tree or branch having the lower end pointed and shod with iron, and a pole, with yoke fastened to it. Two bullocks or buffaloes yoked to this are driven round the field. Ordinarily three or four ploughs are worked together, closely following one another, and each raising a shallow furrow by the side of that raised up by the plough immediately preceding. Only the surface of the soil is thus disturbed, for the plough has no mould-board, and where the ground has to be tilled to a greater depth than a few inches, as for instance in sugarcane gardens, ploughing is continued across and across for many days. For ordinary cultivation it is said that a yoke of oxen are sufficient for the cultivation of a káni of wet and a káni of dry land. With first-rate cattle more can of course be done, and generally bullocks are made to plough a greater extent, but they soon get used up. Besides the plough a levelling plank, of very simple construction, is needed. The rest of the ryot's stock in trade consists of a cart, a few mommaties (Indian spades), two or three iron picks, some sickles, baskets, and pieces of rope, and perhaps a crowbar.

Three modes are employed for raising water. If the lift be not more than a couple of feet in height, a palmyra-leaf basket, having four ropes attached, two on each side, is used. It is worked by two persons, who hold a rope in each hand, dip the basket into the water, and swinging it, when full, up to the level of the channel which has to be supplied, jerk the contents into it. For greater heights the picota (yétham) or

kapila are necessary. The former is worked by men and the latter by cattle. The picota is nothing more than a long beam having a bamboo carrying a bucket at one extremity. It is raised and depressed by men or boys walking upon it, and supporting themselves by a bamboo rail. Except above the ghauts women never work these machines; there they may be often seen mounted upon the beam and working it up and down.

The kapila lift is formed of a large hemispherical leathern or iron bucket, having a long leather tail open at the end. One rope supports the top of the bucket and another is attached to the tail. The former passes over a wheel working between two posts that project at an angle over the water, and the latter runs over a roller on a level with the channel. As soon as the bucket is filled, a pair of bullocks run down a steep slope, drawing a yoke to which the two ropes are fastened. While in the act of being lifted the tail of the bucket is drawn up level with the mouth, and the water cannot therefore escape; but as soon as the level of the channel is reached, the tail is drawn over the roller, while the mouth rises to the upper wheel and the whole of the water is discharged into the channel. The bullocks are then backed up the slope and the operation is repeated. Sometimes a couple of yoke of cattle are employed, and the ropes being let loose from the yoke each time, the animals are led round by a side path to the summit while the second pair is descending, and are thus saved much trying labour. An improved kind of kapila has within the last few years been introduced, but has been adopted as yet by a very few. A large drum revolving horizontally is set up by the side of the well, and to it the ropes of two kapila buckets are attached. A bullock walking round winds up one bucket, while it lets the ropes of the other run out. While one bucket is discharging the other is filling, and the bullock turning, reverses the motion of the drum. An ingenious carpenter of Arni has lately formed a model of this kind of machine, in which the bullock continues its circular course without turning, but it has not yet been practically tested. An ordinary kapila with a pair of bullocks raises about three times as much water as a picota, and a single strong bullock working a drum kapila, with less tax upon its strength, is found to raise half as much again as a pair with the ordinary single-bucket lift, but the cost of erecting the drum and the novelty of the idea has stood in the way of this improved lift being used.

The number of cattle returned as possessed by Government ryots in various years is shown below together with the number of ploughs:—

—	1856-57. (Fasli 1266.)	1861-62. (Fasli 1271.)	1866-67. (Fasli 1276.)	1871-72. (Fasli 1281.)	1877-78. (Fasli 1286.)
No. of ploughs ..	78,396	90,533	108,047	114,810	114,603
Tilling cattle ..	207,473	212,835	236,488	245,949	238,306
Cows	198,466	168,484	173,161	162,866	195,350
She-buffaloes ..	56,326	40,469	45,970	50,561	45,701
Sheep	384,744	321,057	361,388	368,032	371,328

It thus appears that while the number of ploughs has increased in about the same proportion as puttahs, there has been but a small increase in cattle, each plough now having only one yoke of tilling cattle to it. Other cattle would seem actually to have decreased, but it is not unlikely that the returns sent in by villagers are incorrect.

The prices of cattle vary very considerably. Bullocks run from Rupees 100 to 25 a yoke, and cows from Rupees 10 to 30 each. A she-buffalo is worth generally a little more, and a he-buffalo a little less than a cow. Sheep and goats can be purchased at prices varying from 1 to 4 rupees according to their condition and the locality. No green crops are grown by ryots for the support of cattle, and, except above the ghauts, no extensive pasture-grounds are set apart for them. In size and shape they are ordinarily contemptible, and a marked degeneracy has been observed of late years in the breed of the Punganúr cows and Kangundi oxen, attributed to the frequent droughts of the past twenty or thirty years. Besides straw, cattle are fed upon various grasses and leaves of trees, as well as the pods of some of the Acacias and of the Agatha tree. They suffer from many forms of disease, which are treated in various ways, but offerings to the village goddess are generally part of the treatment. The following are the commonest diseases :—

Domma rógam, Telugu; *Ninjadaipan*, Tamil.—This is of three kinds, Sále, Pedda and Nárade Domma. The symptoms of the first are a profuse discharge of saliva and swelling of the throat, which ends in suffocation. The native remedies are (1) baked milk-hedge with fried salt; (2) kambu conjee with fried salt; or (3) onions, pepper, asafœtida, and ómam. Pedda Domma is evidenced by ague, weakness and swelling of the throat; the same remedies are used as for Sále Domma. Nárade Domma is the least violent form of the disease, and branding is said to be an effectual cure.

Nalla rógam.—The symptoms of this disease are a staring coat, hot ears, and purging. The remedies used are (1) white pumpkin pounded with pepper, asafœtida, onions, and ómam; or (2) the leaves of the cherunelli pounded with pepper and onions.

Vekké, Telugu; *Visha Jwaram*, Tamil.—These are the vernacular names for rinderpest. The usual remedies are (1) plantains and ghee, (2) onions, palmyra jaggery, and plantain flowers pounded, (3) sour rice conjee in which is steeped the pounded bark of a tree called 'perume,' (4) pig's lard, (5) the leaves of the 'pillángi' bruised with pig's lard, (6) turmeric powder and ghee applied to the tongue, and (7) a sort of aloe split and given with powdered salt. Pig's lard is used to prevent the disease from spreading.

To kill the worms in foot and mouth disease are applied (1) camphor, (2) powdered chunam with cobwebs, or (3) the leaves of the vadisha tree. Standing the cattle in a marshy place is also considered a good thing.

Káttu rógam, Tamil; *Sarakulu*, Telugu.—This is dysentery, usually

caused by eating rank grass after the rains. A decoction of roots called "thendra" and "adivi gummadi" is administered.

Gurrukalu, Telugu; *Mukudaipam*, Tamil.—The symptoms are inflammation of the throat and profuse discharge of saliva, and the remedies garlic, chillies, jaggery, asafœtida, mustard, "munaga" bark, and the tender shoots of árika with pig's lard.

For ordinary ague and giddiness branding is alone practised, and few cattle have escaped the operation.

The chief value of sheep is for food and manuring fields. Very little wool is got off the long-legged red kind found in the plains, but the kurrumba sheep, above the ghauts, yield a fair supply. They are shorn twice a year—once at the Dassera, and once at the Sivarátri feasts—the wool being worked up into cumblies. Goats' milk is very much appreciated by the people.

The area of land in the Government taluks cultivated under various crops in a series of years appears in the annexed statement, which is followed by some particulars of the cultivation of the principal crops:—

Food-grains.

Fasli.	Rice.			Cholum.	Wheat.	Rágí.	Varagu.	Kambu.	Dholl.	Samé.	Green-gram.	Black-gram.	Mocha-kotté.	Other Food-grains.	Total.
	First Crop irrigated.	Second Crop irrigated.	Unirrigated.												
1280	140,023	55,481	2,151	31,728	26	92,354	104,239	142,499	5,157	15,965	597	1,286	2,559	1,401	595,466
1281	164,772	25,950	5,250	25,817	41	83,222	73,655	98,912	6,564	1,605	1,112	1,253	1,067	3,003	537,603
1282	168,948	88,311	5,403	25,472	14	78,583	62,004	97,146	4,329	8,419	981	1,721	1,356	3,257	545,944
1283	167,785	54,377	5,557	17,560	34	86,376	56,726	60,659	2,060	6,371	599	1,386	1,004	2,356	463,350
1284	162,021	86,891	7,679	17,267	8	73,042	55,132	99,258	4,712	3,091	562	1,948	1,895	3,573	517,079
1285	144,002	34,331	4,172	21,340	47	87,112	53,380	84,757	4,181	3,861	717	1,220	1,968	2,130	443,218
1286	84,406	12,151	3,308	35,801	151	97,166	48,398	108,937	4,488	2,674	346	923	923	2,401	403,218

Other Products.

Fasli.	Sugar-cane.	Cotton.	Indigo.	Oil-seeds.	Horse-gram.	Cocoanuts.	Betel-vine.	Areca-nuts.	Dyeing roots.	Tobacco.	Palmyras and Dates.	Topes of various trees.	Chillies.	Ground-nuts.	Gardens.	Miscellaneous.	Total.
1280	2,772	1,615	14,053	49,073	33,725	1,968	880	37	344	1,096	610	4,034	2,138	1,017	446	4,558	117,826
1281	2,833	532	17,791	65,035	34,940	1,459	971	238	14	927	840	6,007	2,451	561	394	2,781	137,774
1282	2,965	431	22,846	52,390	28,265	1,678	1,005	288	425	970	1,035	7,305	2,020	1,064	526	3,504	126,717
1283	3,498	277	21,844	48,263	29,495	1,630	1,166	257	385	1,357	1,049	6,603	2,886	1,717	567	4,739	125,733
1284	2,712	170	6,700	75,728	26,320	1,803	1,022	13	260	1,138	1,025	9,071	2,233	1,361	543	4,193	134,292
1285	2,390	178	9,216	59,672	26,872	1,847	1,072	33	494	913	1,100	7,190	2,422	1,349	641	5,848	121,237
1286	2,386	189	5,332	56,789	18,629	1,607	1,039	30	406	517	3,305	3,141	948	1,122	619	10,102	106,161

Paddy—Rice, English; Vadlu, Telugu; Nellu, Tamil (*Oryza sativa*).—There are about a hundred different varieties of this grain grown in the district. The chief are called in Tamil

Nír valli.	Mapási.
Sada samba.	Síthá bhógum.
Pishánam.	Siraga samba.
Tuyyamalli.	Kamban jamba.
Chinna samba.	Sughadási.
Mánavári.	Managathé.
Peria samba.	Kódanjamba.
Swarnavári.	Vella kár.
Séru samba.	Kutté kár.
Garuda samba.	Navaré kár.
Molugu samba.	Mutta kár.
Sivan samba.	Mósanam.
Picchavári.	

Some of these are favourites in one taluk, and all but unknown in another.

Almost all of the irrigated land in the district is under paddy, and if water suffices, crops of it are raised upon the same field one after another as speedily as possible. Under large tanks, therefore, there appears a perpetual spread of verdant fields in all stages of growth.

The land is prepared by ploughing after being flooded by rain or from a tank. The former process, called in Tamil "puludi," is adopted when water is scarce, and the latter, called "séru," is considered the better of the two. Ploughing is continued, after short intervals, for from six to a dozen times during a month or six weeks, manure being spread over the land in the shape of farm-yard refuse and ashes. Leaves and the small boughs of various trees are also added, where available, just before sowing time, and are trodden into the mire by men and women. In the case of saltish soils oil-cake is sometimes employed. When the surface has been levelled by means of a plank drawn by oxen, the field is ready to receive seed or seedlings. In the case of broadcast sowing the seeds are well trodden in by men, but it is more usual to sow in a seed-bed and transplant, the advantage of this plan being that water and labour in weeding are economised as well as manure. Transplantation takes place when the plant is about 10 inches or a foot in height, and the seedlings are planted by parties of women in the miry field at a distance of an inch or two from one another, according to the richness of the soil.

Before being sown the seed-grain is soaked in manure and water for several hours, and then, being put into a basket or pot, is covered with straw, upon which a heavy weight is placed. A little water is daily sprinkled upon it, and it is occasionally exposed to the light, until on the fourth day it has sprouted and is ready for the field or seed-bed. After being sown, water is allowed to stand on the soil for one day, and is then

drawn off for four or five days until the shoots have made a good start. From thenceforward until the time of ripening constant irrigation is necessary, about a couple of inches of water being made to stand upon the land, but not to stagnate; a regular flow from field to field is allowed once in two or three days. Oil-cake is sometimes used as a manure, powdered and thrown over the crop when a month old. A few days later the first weeding takes place, and the plants are, if necessary, thinned out. Weeding is repeated two or three times as required, and if the ryot's means allow it. The ears begin to form about a month before the crop is mature, and a fortnight before reaping irrigation is discontinued that the grain may harden. Different varieties of paddy take from three to six months to mature. At reaping the plants are cut with a short sickle about 2 inches from the ground, tied into bundles, and carried to a dry spot used as a threshing floor. A flat rock is generally selected for this purpose, but if none be handy, a piece of ground is levelled, watered and tamped with clay until it has a hard surface. The bundles are then beaten smartly upon the ground, and afterwards, being untied and loosely spread over the threshing floor, are trodden out by cattle tied neck to neck and driven in a circle. Finally, the straw is formed into bundles and the grain winnowed in some high and airy spot.

Rice is not supposed to be fit for food until it is at least three months' old, but the poorer labouring classes often use it as soon as it is hard enough to be pounded.

There are two crops of rice, the hot and the cold weather crops, called kár and vysákam, after the months in which they usually ripen. The kár crop is sown about June or July, and being a six months' crop is harvested about December. It is quickly followed by the vysákam, a four months' crop, which is off the ground by April or May. The only remarkable kind of paddy which needs separate remark is called "munagada" or submerged. It is grown, only in a few localities, in the beds of tanks before they are covered with water. As soon as it has sprouted well it is said to live, though submerged, below as much as three feet of water. The stem is as thick and strong as a stalk of cholum, but the grain is coarse and not much prized.

In the husk the grain is known in English as "paddy," in Tamil as "nellu," and in Telugu as "vadlu." It is converted into rice (Tamil arisi, Telugu bíyam) by the process of husking, which is performed either by parboiling and then pounding, when it is called "pulungal arisi" (Tamil) or "uppidi biyam" (Telugu), or by simply drying and pounding, when it is known as "paccha arisi" (Tamil) or "paccha biyam" (Telugu). Pounding is effected in two ways, the common mode being to beat the paddy in a hollow stone with a long pole shod with iron, but sometimes a lever (yétham) is used which is worked by the foot. Brahmans entirely confine themselves to dried grain, considering that which has been parboiled as unclean.

The mode of boiling rice for food differs among different castes.

Some, and especially Brahmans, use only so much water as the grain will absorb in the boiling, while others use more, generally twice the bulk of the rice, and what remains, called conjee, is considered a refreshing drink. Boiled rice is called "shóru" (Tamil) and "annam" (Telugu). The grain is sometimes ground into flour "má" (Tamil), "pindi" (Telugu), or broken into pieces "noyi" (Tamil), "núkalu" (Telugu), and made into gruel or cakes prepared with milk, buttermilk, jaggery, or sugar.

Sugarcane—Karumbu, Tamil; Cheruku, Telugu; (*Saccharum officinarum*).—This crop is always raised upon irrigated land, more often under a well than a tank, since the former affords a more certain supply, and the canes need constant watering for the ten or eleven months that they are growing. It also needs much manure, and is an expensive crop to raise, so that only the richer ryots attempt it. In many parts it is not the fashion, so that though there may be wealthy farmers, little or no sugarcane is seen. It is chiefly raised above the ghauts, where its cultivation is carried on more carefully and scientifically than elsewhere, but a good deal is also grown in Chittoor, Chandragiri, and the west of Kárvetnagar.

There are several varieties of the cane, but the ordinary ones are called rastháli, námam, izar, red and big, which only vary in the size or colour, and are cultivated in the same way and with much the same results. The crop is never grown on the same ground in consecutive years. A field which has carried paddy, rági, or other irrigated crop is therefore selected, and in December its preparation begins. Should it lie low a channel is dug all round to act as a drain, and the soil is daily ploughed across and across for several days until it has become thoroughly pulverised. To assist in producing this effect, men with heavy sticks beat the hard clods to pieces. When the tilth is fine enough, the surface is levelled and sheep are penned on it for several days. A great amount of farm-yard manure, with faded kánaga flowers, is also brought (sometimes, it is said, as much as 75 tons to an acre) and worked in with ploughs. Then the field about April is divided into ridges, separated by channels, and in the ridges are lightly placed cuttings of the previous season's cane, about a thousand to the acre, each set in a little powdered manure. For a fortnight the channels are flooded once in four or five days until the cuttings send out shoots; then the soil is loosened with a hoe, or by a plough drawn by men, and no water is allowed for a week. After this the channels are cleared, the plants earthed up, and irrigation is carried on regularly twice a week (except in rainy weather) until the canes mature. When they are a foot high green leaves (above the ghauts always of the kánaga) are buried in the trenches between each row. Above the ghauts also when they have attained the height of a yard, ryots dig pits in the irrigating channels at the head of each trench, and in each pit place a maund or two of kánaga oil-cake mixed with fresh cow-dung and water. This is allowed to ferment for four days;

and at the end of that time, as the stream passes down each trench, a boy stirs up the mixture, a little of which mingles with the water and is carried along with it. This mode of manuring has the very best effect, but is only repeated once more during the growth of the crop.

When the canes are 4 feet high their sharp leaves begin to be troublesome, and are therefore rolled round the canes and tied, thus protecting them from the sun and hot winds, preventing splitting, and keeping them succulent.[1] When 6 feet high upright posts are planted on the ground and bamboos tied to them horizontally, by which the canes are supported; a higher row is added as the crop increases in height. All this time weeds have to be carefully eradicated, and the thorn hedge surrounding the field kept intact, as cattle graze greedily upon the canes. In February or March the crop is cut close to the ground, except a portion left for cuttings, and a mill having been set up hard by, the juice is pressed out of each cane, after a foot or so of the top, which is sapless, has been cut off and thrown away. The mill is a rough looking machine, made to take to pieces, but in spite of its roughness it performs its work fairly well. Two cylinders of Acacia wood are placed vertically side by side, having screws cut near their upper extremities which work into one another. One of the cylinders is slightly higher than its neighbour and has a horizontal arm at its summit, which by means of ropes is dragged round and round by oxen. As the cylinders revolve, the canes are introduced between them, and carried through, parting in the passage with their juice, which flows along a trough into a pot set on the ground. Each cane is thus pressed two or three times, and as soon as enough juice has been obtained to fill one of the broad shallow boilers the process is stopped for a time, and the liquid, before it has had time to ferment, is boiled, with some lime water, for about an hour, over a fire of wood and sugarcane refuse, which burns with great heat. When sufficiently boiled it is poured into a tub or hollow in the ground faced with stone, and is slowly worked about with a stick having a circular piece of wood at the end, until it stiffens and becomes jaggery. About 200 canes of the small and 175 of the big variety generally turn out a Madras maund of jaggery. The total yield of an acre is worth at the lowest Rupees 150, and often as much as Rupees 300 where it is carefully tended.

To produce coarse sugar the boiled juice is rapidly stirred about with a rolling pin until it has set. For fine sugar and sugar candy the process is slightly different, the boiling being stopped earlier than for jaggery. When sufficiently boiled the juice is put into pots, which are covered, and allowed to stand for a fortnight, by which time their contents has become solid. A few holes are then made in each of the pots, which are placed upon empty ones, and in the course of three weeks

[1] One of the Tahsildars of the district on being asked whether ryots practised rotation of crops in his taluk, gave this as the only instance of their doing so!

most of the molasses drips through, leaving behind a crust, some two or three inches deep, of fine sugar, which is at once removed, the rest being allowed to drain for about a month or six weeks longer. The sugar thus produced is further purified by boiling. It is then strained and boiled again for another hour, towards the close of which a little milk and ghee are added. Finally, the syrup is moved from the fire and well stirred for a quarter of an hour. When dry the finest native sugar, called búrá, is produced.

To make sugarcandy, the second of the above two boilings is slightly curtailed, and the syrup is poured into pots in which are placed thin spits of bamboo. Cloth is then tied over the mouths of the pots, and they are stood for forty days upon paddy husk. After that the fluid portion which remains, called "kalkanda panakam" is poured off, and considered a very good and wholesome beverage. The bamboo spits coated with sugar crystals are separately secured. This manufacture is almost confined to the town of Baireddipalle in the Palmanér Taluk.

Sugar and jaggery are largely used by the natives, mixed with their food or spread upon cakes with ghee. Pieces of the cane are often bought by the poor, stripped of their bark, and masticated.

Betel-vine—Vethilé, Tamil; Thamalapák, Telugu; (*Chavica betle*).—This is a three years' crop, grown upon land capable of incessant irrigation and therefore usually served by a well. The varieties grown are—

Tamil.	Telugu.
Kamavéru.	Kamavéru.
Vella Vetthilé.	Kallejédi.
Karrupu Vetthilé.	Nallákulu.
Gowlipáthram.	Gowlipáthram.
Kósáttu	Kósáttu.

The land is prepared about August, not by ploughing but by having long parallel trenches, 1½ feet × 1½ feet, dug across it at intervals of 5 or 6 feet. The excavated soil is placed upon the spaces between the trenches, and two double rows of linseed (avithi, Tamil; avasi, Telugu) are sown thickly and covered with manure. The trenches are then flooded twice a day, and the newly sown seeds, being constantly moistened with water from the trenches, sprout within a week. In three months, or about October or November, the plants have attained a height of 5 or 6 feet, and it is time to put down the vine cuttings. These are cut about a foot long, with two or three joints, and are planted in well manured pits dug about 2 feet distant from each other. Two cuttings are set in each pit and are covered with manure. In two or three weeks they send out shoots, having been carefully protected from the sun by varagu straw which is drenched with water several times a day. When the linseed is 10 feet high the four rows are tied together above the vines, and being strengthened with bamboos, form a stiff support on which the vines climb. Once in three or four months the pits are well manured, the soil opened, and the vines earthed up. They begin to yield when nine or ten months

old, the leaves being nipped off by means of an iron instrument worn on the thumb and index finger. They continue to yield leaves for two or even three years; the leaves are tied in bundles of four hundred each, sold for an anna. An acre in two years produces from 5,000 to 7,500 of these bundles, worth from Rupees 300 to Rupees 500, but the profits on the cultivation, which is very expensive, are given at from Rupees 70 to 100 an acre. About 5,000 cuttings worth Rupees 50 are planted in an acre, and much manure is consumed. The trenches have always to be full, and the intervening soil kept moist. While the vines are growing, plantains or other plants are often grown between the trenches.

The leaves of the betel are chewed by natives with areca nut and fine chunam.

Plantain—Vála, Tamil; Ariti, Telugu; (*Musa paradisiaca*).—These plants, like betel, require constant irrigation. There are a large number of varieties, the chief being

Tamil.	Telugu.
Rastháli.	Rastháli.
Bonthé.	Bonthá.
Bengála.	Bangála.
Yánei.	Yénuga.
Pé.	Vetti.
Sevva.	Yerra.
Pacché.	Paccha.
Yenné pannayam.	Núna punnayam.
Pídi mowthé.	Pedicha.

According to sástram, or agricultural science, the cultivation should be begun in January or July, but practically it is commenced at any time that suits the ryot.

For each plant a pit, measuring 2 feet each way, is dug and filled with rich soil. The pits are two or three yards from one another, and in each a sucker is planted, so that from 700 to 1,000 plants can be grown on an acre. Irrigation once a week is needed, and the ground is opened up and weeded once in two or three months, and when the flowers are forming fresh manure is applied. Ten or twenty suckers spring around each root, but all except two or three are destroyed as they weaken the parent tree. When the plant is six or seven months old, a single flower stem is thrown out, and four months later the fruit is ready to be cut. This is done while it is yet green, as the fruit ripens after it is plucked. Sometimes the flower, and sometimes the unripe fruits, are picked and used in curries. While the garden is yet young, sweet potatoes and different kinds of greens are sown between the plants, and the profits per acre are thus said to reach Rupees 100 a year. As soon as the fruit is gathered, the plantain is cut down, and one of its suckers left for the next year's growth, the others being available for new gardens. In this way the land is cultivated for from two to four years, after which it is cleared and used for some other wet crop.

The leaves of the plantain are used for packing butter, jaggery, &c., and for plates. The fibre of the stem is used as bast for tying up plants: it would make an excellent rope fibre, but is not used for that purpose.

Rági, Telugu; Kévar, Tamil; (*Eleusine corocana*).—This is a very favourite four months' crop, the grain being largely used by the labouring classes. It is not a dainty food but very nutritious. There are four varieties, the big, small, white, and black. Rági is grown both upon irrigated and unirrigated land, but most commonly in that which is commanded by a well. When dependent upon rainfall alone it is sown so as to get the benefit of one or other of the monsoons, that is from May to July, and from October to December. Under wells and tanks it is sown and reaped throughout the year.

The land is first ploughed from four to eight times after heavy rain in dry, and after flooding in wet land. Previous to ploughing cattle or sheep are often folded on the field, in which case no further manure is needed; but if this is not convenient ordinary manure and indigo refuse are placed on the field and ploughed in, the quantity varying with the ryot's means. In rainfed lands the seed is sown broadcast after a good shower, 25 lbs. to an acre, and covered by a light ploughing. In about a month the soil is opened by another ploughing, or is hoed up and weeded, after which nothing further is required except watching. With rági is sometimes sown korra, samé, káramani, castor oil, dholl, or indigo.

Under irrigation the crop is usually transplanted from a seed bed when about a month old. The field is laid out in small plots, which are watered once a week, and weeded once.

Only the ears of rági are cut as they ripen, and being heaped together for two or three months, the grain is beaten out with sticks or trodden out by cattle. It should be kept some months before use. Being ground into flour it is formed into a sort of pudding (kali, Tamil; sankati, Telugu), gruel (kúlu, Tamil; ambali, Telugu), or various sorts of cakes. The pudding is prepared thus: the flour of rice, kambu, or cholum is put into boiling water, and when it is three parts cooked, three times as much rági flour is added, and the whole boiled into a stiff paste. To make the gruel, rági flour is mixed with water and allowed to stand for twelve hours, by which time a slight fermentation has set in. Thin rice, kambu, or cholum flour being boiled, three times their bulk of the fermented mixture is added with salt. The mixture is again stood for twelve hours, after which it is drunk dissolved in water or buttermilk. The cakes usually made are composed of rági flour, salt and water, formed into a paste, flattened by the hand, and baked on a flat pan. They are eaten with jaggery.

Kambu, Tamil; Sajja, Telugu; (*Panicum spicatum*).—This is another favourite four months' crop, which is never transplanted, and is usually grown on dry lands. It is sown in the south-west monsoon about May or June, and harvested before the beginning of the north-east rains. The varieties are the big and small. The first showers in the year are utilized

for ploughing, which is repeated four or six times, manure being worked into the soil. After a heavy shower 10 or 12 lbs. of seed are scattered, and the soil again lightly ploughed over. Sometimes dholl, káramani, indigo or gingelly are thus sown with it. The crop requires one, and sometimes gets two, subsequent ploughings and weedings, the first having the effect of setting the seedlings in line. Rain once a fortnight suits it best, but if healthy it is unaffected by three weeks' drought. Excessive wet is injurious to it, so kambu is generally grown on porous soils. As birds are very fond of the grain, the field needs careful watching. Like rági it has only the ears cut, and beaten or trodden out after being thoroughly dried. It is prepared in the same way as rági, except that it is first husked by pounding. The straw is largely used for roofing huts.

Cholum, Tamil; Jonna, Telugu; (*Sorghum vulgare*).—There are three varieties of this grain, the white, red, and yellow. It is ordinarily a cold-weather crop, sown about November and reaped four months later. It is however also sown for the south-west monsoon, and should then be watered two or three times a month, unless the rains are good. The preparation of the soil is similar to that for the dry grains already described, but transplanting is never practised. It is generally sown by itself, though rarely indigo or gingelly grows with it in the south-west monsoon, and horsegram is occasionally raised with the yellow sort in the cold weather. Owing to its height the crop is cut low, and the ears subsequently removed. The straw is a favourite and excellent food for cattle. The grain is pounded into flour, mixed with water, and after standing for some time, is boiled, bran being added when it is nearly done. Cakes are also made of the flour.

Seeds of the *Sorghum saccharatum* have of late years been distributed and experimented upon with little success by the natives. From carelessness or other cause the outturn has been less than that of the indigenous variety, and as there is no demand for the grain, and ryots will not raise crops simply for forage, it is not likely to become popular.

Maize—Mokkácholum, Tamil; Mokkájonna, Telugu; (*Zea Mays*).—This is not a common crop, but is largely and successfully cultivated in the environs of Vellore, where it is freely irrigated and grown on land well manured with cow-dung, ashes and sheep's wool. It is also grown in Chandragiri to some extent. There are two varieties, the big and the small, the former ripening in three months, and the latter about a fortnight earlier. It is always sown by itself, from April to September, in lines, and has to be watered every alternate day in the hot weather, but in the cold season only once in four or five days; the yield of the latter season is the heaviest. The cobs are bought by the poorer classes and eaten raw or parched; the stem is greedily eaten by cattle.

Some attempts to introduce a better sort of seed have been made, and the people have been more ready to take to it than to *Sorghum saccharatum*. At present however the new seed is known but to a few.

Varagu, Tamil ; Árike, Telugu; (*Paspalum frumentaceum*).—There are two varieties of this grain, the big and the small, both sown on dry land alone, in July or August, and reaped in the following January or February. It is a very hardy crop, withstanding drought continued for a month, and is considered to exhaust the soil greatly, so that ryots often let a field lie fallow for a year after varagu. Sometimes castor oil, dholl, samé, and other grains are grown with it.

In the Kárvetnagar Zemindari the small variety of this grain is cultivated with more care than elsewhere, and is often grown on wet land, into which it is transplanted. Being watered about once a week it yields three times, once in the fourth month, again six weeks later, and finally after six weeks more. After the first and second yield, the land is ploughed up lightly. The first crop is the best, being twice as much as the second, and this half of the last. The plant is usually cut near the ground, and stored for some time before the grain is trodden out. The grain has a hard husk, which is removed by grinding in a hand-mill, the surfaces of which are coated with clay and ashes to prevent excessive friction. It is then boiled and eaten like rice by the poor. Cakes are also formed of its flour.

Samé, Tamil ; Chámalu, Telugu; (*Panicum miliaceum*).—This is another six months' dry crop, raised at the same period as varagu. It however produces a scanty outturn, and is not much cultivated. The grain is boiled like rice : one of the commonest preparations is called paramánam. It is also made into cakes.

Téné, Tamil ; Korralu, Telugu ; (*Panicum Italicum*).—This is a four months' dry crop, sown in July, generally upon unirrigated land, but occasionally under wells, when it is irrigated once a week. It is generally sown by itself. Only the ears are reaped, and the grain husked and boiled like rice, the preparation being called paramánam. Cakes are also made of it.

The crop is a pretty one, having drooping ears something like barley.

Dholl—Thovaré, Tamil ; Kandulu, Telugu; (*Cajanus Indicus*) —This is a dry crop, usually sown in unirrigated land about July, and reaped in December. There is nothing peculiar in the cultivation. When the pods are ripe the plant is cut down near the root, and after being dried for two or three days, is beaten upon the ground or on a bamboo mat, until the pea-like seeds fall out. They are then soaked in water with which red earth has been mixed, and kept so for a day or two, after which they are dried in the sun, and being bruised in a handmill are at once ready for food. Dholl is considered very nutritious ; sometimes it is reduced to flour and made into a broth, and sometimes cooked as a curry with tamarinds and vegetables. The stalks of the plant make an excellent charcoal, esteemed the best for gunpowder.

Macchakotté, Tamil ; Anumulu, Telugu ; (*Lablab vulgaris*).—This crop is always sown with some other grain, and chiefly with kambu, rági or cholum, in June or July, but is reaped in December or January. The

pods are plucked when ripe, and when dry are beaten with sticks to separate the beans. These are cooked like dholl, or eaten after being only boiled. They are largely given to cattle, and in the south of the district are not much consumed by the people. There are two varieties, the white and the red.

Black Gram—Ulundu, Tamil; Uddalu, Telugu; (*Panicum flavidum*).—This is usually grown upon paddy-lands after, or just before, the paddy has been reaped. The seeds are cast into the cracks which form after irrigation is discontinued, and no ploughing is required. Sometimes however it is grown upon dry land with cholum or castor oil. The ordinary sowing time is August or September, and the harvest comes in by December or January. On wet land it should have irrigation twice a month. The grain is bruised in a mill and made into a curry with vegetables and various condiments. The pulse is often made into cakes called vadé, which are always used by Brahmans at their anniversary ceremonies.

Green Gram—Pair, Tamil; Pesalu, Telugu; (*Phaseolus Mungo*).—This crop is cultivated and used much in the same way as black gram, but is less frequently grown on dry paddy-fields. The flour is employed in washing the body instead of soap.

Káramani, Tamil; Alashandulu, Telugu; (*Dolichos sinensis*).—This is usually sown on dry lands with kambu or cholum. The pods are picked, dried, and beaten with sticks, and the seeds used much in the same way as black and green gram.

Horse Gram—Kollu, Tamil; Ulavulu, Telugu; (*Dolichos uniflorus*).—The time for sowing horse gram is September or early in October. Only the poorer soils are fit for it, since upon rich land it runs to leaf and produces few flowers. It is never irrigated, the north-east rains, with the cold weather dews, being sufficient to mature it by January, when the plants are plucked up by the root, stored till they are dry, and then beaten or trodden out. The preparatory ploughing is slight, and the manure given to the land none. It is not used for human consumption, but given to draught cattle and horses.

Bengal Gram—Paccha Kadalei, Tamil; Chenigalu, Telugu; (*Cicer arietinum*).—Very little of this is grown in the district. The season for sowing is September, and the cultivation similar to that of horse gram. The grain is used in curries, and made into flat cakes, taken with curry.

Gingelly—Yellu, Tamil; Núgalu, Telugu (*Sesanum Indigo*).—There are two varieties of this very favourite dry crop, the big and the small. It is an early crop, being sown, if the rains are sufficient, in April or May, and reaped four months later. It is sometimes irrigated, and is then sown as early as January or February. The plant is cut near the ground and after being dried for a week or two is beaten with sticks. The oil is extracted in oil mills, a measure being yielded from four measures of seed. Gingelly oil is considered the very best, and is much used in native cookery, as well as for anointing the body: the cake is given to cattle.

Much of the seed is exported from the district and sent to Europe, where a good deal of the so-called olive oil is extracted from it.

Ground-nut—Vér kadalé, Tamil; Vér chenigalu, Telugu (*Arachis hypogica*).—In parts of the districts, particularly Wálájá, Chittur, and Vellore, this is extensively raised: in other parts, and particularly above the ghauts, it is hardly seen. The field is manured by penning cattle upon it, after which it is ploughed some half dozen times, and in July or August the seed is sown. If the unbroken nuts are used, 30 lbs. are required for an acre, but if they are broken and the kernels only planted, 10 lbs. suffice, though the yield is less than in the former case. The field requires irrigation (generally supplied from a well) once a month, and, if possible, gets it once a week. No other seed is sown with it. After six or seven months, the plant withers, a sign that the nuts, which bury themselves in the ground, are ready. The soil is then moistened and dug up with the small pick called 'kallakaṭṭu,' and the nuts, twenty or thirty fold of the amount sown, are collected and husked. The oil is obtained by pressing in a mill, and is used for lamps and sweetmeats and for adulterating gingelly. The poorer classes are fond of eating the nut raw or parched. It is the same as that called by the Americans the pea nut.

Castor oil—Mutthu, Tamil; Āmidálu, Telugu (*Palma Christi*).—This plant, of which there are two sorts, the small and big, is rarely sown alone, but generally in lines among rági, or other occasionally irrigated crop, or by the margin of a water channel. It will, however, grow without irrigation, and in all sorts of out-of-the-way places, in backyards, hedges, &c., where it is planted for domestic use. The sowing time is June or July, and the reaping from January to April; but, if watered, the plant is said to live, and yield for two years. In this district, however, it is allowed to die, and a fresh crop is raised annually. It grows to the height of 7 or 8 feet, and bears clusters of round seed pods, which, as they from time to time split, are gathered. After a month or more the pods are put upon a hard piece of ground, and a small plank of wood is rolled briskly over them, releasing the seeds. These are first boiled in water, or fried in a pan, and then pounded with a rice-pounder. They are next mixed with five times their bulk of water, and well boiled. The oil rises to the surface, and is either skimmed off, or more often collected with the palm of the hand, which, laid on the surface, brings away a small amount of oil adhering to it. This is rubbed off upon the side of a pot, and the process repeated until all has been removed. Being by this time dirty, it is next reboiled and strained.

Castor oil is used as a purgative medicine and for lamps. It is mild in its effects compared with that produced in Europe, and is used to an almost incredible extent in the case of infants, about a tea spoonful being given daily by every mother, until the child is two or three years' old. Every adult takes a dose once a month and regards it as a necessary of existence.

Cotton—Panji, Tamil; Patthi, Telugu (*Abutilon Indicum*).—A very little of this is grown, as black cotton soil does not occur in the district. It is sown in July, sometimes with rági, and can, it is said, be kept on the ground for three years bearing flowers annually, but very little is known of its cultivation.

Indigo—Níli, Tamil and Telugu (*Indigo fera tinctoria*).—This is a valuable dry crop, which is chiefly raised in Vellore, Gudiyátam, and Kárvetnagar. It is rarely irrigated, but is sometimes sown in rági fields after the first weeding, and in paddy-fields a few days before reaping. On dry lands it is often grown with kambu, chólum, or rági from November to January. The land is not usually manured, and indigo so far from exhausting is believed to strengthen the soil.

The leaves are cut three times just before the plant flowers. The first cutting takes place when the crop is three months' old, after which the field is lightly ploughed. The other cuttings follow after intervals of two or three months, and are better than the first. The leaves are tied into bundles, called 'biguvus,' with ropes 2½ yards long, and from fifty to a hundred of these are got off an acre, the price varying in different years. Ryots rarely prepare the dye themselves, but sell the leaves to some one who possesses vats, and from whom they have often received advances. A few, however, manufacture it on a small scale in large earthenware pots about 2½ feet high. The leaf is treated both dry and fresh, but in the pot manufacture fresh leaves are never used. From dry leaves the better dye is obtained, but it is rather risky, as a sudden shower of rain falling upon the drying plants brings out the colour at once and spoils them.

The mode of manufacture is this:—The fresh leaves are packed in a masonry vat and kept down by a bamboo mat, upon which heavy poles are laid. Clear water is added, and they are left to soak and ferment for a day. A scum darkening to purple rises amidst violent fermentation, which subsides as the scum reaches a copper colour. The water at this stage is drawn off through a vent into another vat upon a lower level, where for about three hours it is churned with wooden boards. A decoction of néredi bark, or lime water, is added when fine granulations are seen to form, and the liquid is allowed to settle. After a few hours the clear water is drawn off, and the thick residuum placed in a boiler and boiled until all scum has disappeared. When it becomes stiff, it is strained through a clean cloth into moulds and left to dry.

In the pot manufacture, which was the original mode practised in the district, the process is somewhat different. Dry leaves are soaked in water, and boiled for about an hour, by which time all the dye has been extracted. It is then allowed to stand, and the clear water being poured off, the rest is boiled and strained into moulds. Dry leaves are also used in vats, but only require to be soaked for six instead of twenty-four hours. The rest of the process resembles that adopted for fresh leaves. Indigo refuse forms a very much prized manure.

This industry is a failing one, and has been so for several years. All over the district fine masonry vats may be seen abandoned and falling to ruin.

Bhang—Ganja, Tamil and Telugu.—This is only cultivated on the Jewádies by the Malayálies. As the soil is very rich no manure is used. They never plough, but hoe up the field and sow the seed in July or August, reaping it in December or January. The leaves are picked and heaped in a hut for a month, being turned every three days. In a month they are properly seasoned and sold to the people of the plain. Bhang is used as a medicine, and is smoked by Mahommedans and the lower orders of Hindus.

Hemp—Chennappé, Tamil; Janappa, Telugu (*Cannabis sativa*).—This fibre crop is reaped in about two and-a-half months, and is generally sown in July, but also at any other time. It is believed to exhaust the soil very much, and is not largely cultivated. The average yield of an acre is about 25 Madras maunds of fibre, which is prepared thus:—The plants are cut when 4 or 5 feet high, the stem being then as thick as a man's finger. They are then dried, beaten to separate the seeds, and tied into bundles, which are soaked in stagnant water, until fermentation has set in, and the tissues begin to rot. Each bundle is next beaten on a stone, washed, and beaten again, until the fibres are clean, when they are exposed to the sun and dried. Sometimes they are buried in pits for a time before they are finally washed, cleaned, and dried. The fibre, being spun into twine, is used for making fishermen's and fowlers' nets, and also for weaving gunny bags. These are largely produced in Pallikonda in the Vellore Taluk.

Roselle—Kasiri, Tamil; Gógu, Telugu (*Hybiscus sabdariffa*).—A good fibre is obtained from this plant, which is of two sorts, white and red. It is generally grown with chillies, brinjals, &c., or planted by the side of water channels. The red roselle is a six months' and the white a three months' crop. The fibre is prepared in the same way as hemp, and the leaves and ripe calices are boiled and eaten as greens.

Hill aloe—Kathárlé, Tamil; Kalla manda, Telugu (*Agave Americanus*).—This is not cultivated, but grown as a hedge row, and yields a very excellent fibre. The leaves, after removing the thorny edge, are buried in mud for three weeks, and then beaten on a stone, washed, and wrung out. Some also scrape them on a board with a bamboo or blunt knife. The fibre is twisted into a twine with which mats are woven. As a rope it is used for bullocks' halters, and other agricultural purposes.

Yerkam, Tamil; Jilladu, Telugu (*Kalatropis gigantea*).—This plant would yield another excellent fibre, but is never used for the purpose. It is a large weed, growing thickly after long neglect upon paddy-fields.

Tobacco—Pogalei, Tamil; Pogáku, Telugu (*Nicotiana tabacum*).—There are two varieties of this plant, the broad short leafed, and the long narrow leafed. It is always grown on very good land, well ploughed, richly manured with cowdung and ashes, and irrigable

from a well, if possible from one with slightly brackish water. The seed being very small only a little is sown, and that in seed-beds, at the beginning of the cold weather. The seedlings are transplanted, when about 2 inches high, into small rectangular beds, each plant being rather more than a foot distant from the next. For about a fortnight they are shielded from the sun by leaves, and are daily watered. After that the soil is hoed and weeded, and the plants earthed up after a little manure has been put over the roots. Thenceforward irrigation twice a week is necessary, and two months after sowing, when the plants are about 2 feet high, the head of each is nipped off. A shoot is soon put out from each leaf stem, and is at once removed. When four months old the leaves show that they are ripe, by developing small white spots upon their upper surfaces. The plants are then cut near the root, and left to wither in the sun for a few hours, after which they are removed to a pit dug for the purpose, carefully arranged in it, and covered, first with varagu straw, then with palmyra leaves, and finally with earth. After a week the heap is opened and the leaves being plucked from the stems, and strung upon a cord, are exposed to the sun till they are dry. Sometimes they are at this stage sprinkled with country vinegar. About the fourth morning they are collected, still damp with the night dew, and arranged in the shade in a circular heap, all the tips pointing inwards, with palmyra leaves below and above the heap, and a heavy weight over all. At first daily, and afterwards once in two or three days, the leaves are unpacked and the whole rearranged as before. After a month they are considered cured, but form very bad tobacco.

From forty to sixty maunds is the ordinary yield per acre, giving a profit of about Rupees 100; but it is a very troublesome crop to raise and prepare for the market. The process of curing varies slightly in different parts The cured leaf is chewed or smoked as cheroots, or as cigarettes rolled in a green leaf. A good deal is made into snuff, being slightly heated and powdered with ghee and chunam.

Chillies—Molagá, Tamil; Mirapakáya, Telugu (*Capsicum annuum*).—Only one sort, a large red kind, is ordinarily cultivated, very much in the same way as tobacco, except that it is often grown with brinjals, along the borders of beds of other garden crops, or by the side of a channel. The seed is sown in June or July, and in December or January, and when three months' old the plants begin to yield and continue to do so for three months. Each fruit as it ripens is picked and dried. Chillies are very extensively used in all native condiments.

Saffron—Manjal, Tamil; Pasupu, Telugu (*Curcuma longa*).—This plant is cultivated during most part of a year. About April portions of the fresh root are put down in small, well-manured beds, and soon throw out shoots. They are constantly watered and weeded, until in the following January or February the plant withers and is cut away, the root being dug up with small picks. The yield is generally 200

maunds, ten maunds having been sown in an acre. The root is prepared for two purposes, viz., for condiments (kari manjal, Tamil; kúra pasupu, Telegu) and for colouring (sáya manjal, Tamil; sáya pasupu, Telegu). The edible preparation is generally boiled in cowdung and water in order to prevent its being eaten by insects. The colour saffron is partly dried, then boiled, and finally soaked in hot water in which chunam and tamarinds have been placed. After soaking for two or three days it is taken out and dried, when it becomes quite hard. Married women grind it into powder on one of the Tirupatti sandalwood stones, and then, mixing the powder with water, colour their bodies yellow with it. They also pound it with a rice pounder, and, adding a red pigment, make with it the mark, called kunkumam, upon their foreheads. A scented sort of saffron, which is prepared in Bengal, is often used for these purposes and called kastúri manjal.

WEAVING.

Next to agriculture this is the most extensive industry in the district. The Kykalars are the most numerous of the weaving castes, and produce only the common cotton cloths worn by the people. The Sálias and Sénias interweave silk, while the Patnulkárs make fabric entirely of silk. The Jándras of Maderpák produce parti-coloured cotton handkerchiefs.

The process of weaving is very simple. English thread is almost entirely used, being bought in Madras not only white, but dyed various colours. A few dyes the weavers are themselves able to apply. The thread is first turned off upon a hand spindle (ráthnam) and then the warp is formed under the shade of a tope. Bamboo sticks, 120 in number, are fixed upright in the ground, at a distance of a cubit from one another, and ten women or children, carrying ráthnams in their hands, walk up and down this line, one behind the other, intertwining the thread between the bamboos until 1,920 threads of various colours, according to the pattern desired, are thus arranged. For this work each gets half an anna,—a small remuneration for walking four miles. To form a warp sufficient for eight women's cloths 40 miles have thus to be traversed. In weaving silk cloths or the finer fabrics, the length of the warp is less than 60 yards.

As soon as the threads have been arranged, the bamboos are plucked up and rolled together with the threads upon them. Trestles are then set out in the tope, and upon them the warp with the bamboos is stretched horizontally and sized by means of large and long brushes soaked with rági conjee, and carried along by two men. This having dried, the whole is rolled up, and placed in the loom in the weaver's house. The weaving room is a long, narrow, dark chamber lighted by

one small window close to where the workman sits. The loom is constructed on the simplest principles, and can be taken to pieces in a few minutes forming a light load for a man. The alternate threads of the warp are raised and depressed, to receive the woof, in the following manner. Two pairs of bamboos are joined together by their twine loops, and being suspended from the roof, are also joined to two pedals near the floor. Through the joining loops of one pair of bamboos run half the threads, and through those of the other run the other half; thus by depressing one pedal with the foot and raising the other one set of threads is depressed, and the other raised so as to admit of the woof thread spool being shot across. This thread is forced home by a light beam suspended from the roof, and then, the position of the pedals being reversed, the woof thread is shot back again between the reversed threads of the warp. In this way about three yards can be woven in a day, and the whole 60 yards in three weeks. The profits are small, a cooly weaver receiving 8 annas for making an ordinary woman's cloth 8 yards long. For the finer sorts, which take longer, the wage is higher, but never more than 3 annas a day. Cotton cloths for women sell for from Rupee 1-12-0 to Rupees 4. Those containing a little silk fetch from Rupees 4-8-0 to Rupees 6-8-0, but the Sálays and Sénias, who weave them, do not earn more than their Kykalar brethren, and the Jándras of Máderpak are in about the same condition. These used formerly to make the ordinary pink and white square handkerchiefs, used chiefly by Mussulmans, but gaudy patterns have been supplied them for many years, perhaps first by the East India Company, though the trade is now in the hands of a few large native firms in Madras, who make advances and receive cloths in payment. These cloths are of three sorts—

(1.) Thella billa sápulu: containing 8 squares 3 feet × 3 feet each, pattern red and white; value from Rupees 3 to Rupees 5, and exported to Singapore, Penang, and Colombo.

(2.) Battáy Taram: 8 squares 32″ × 32″, pattern red and white centre with blue and green borders; value Rupees 2 to Rupees 4 and exported to Singapore and Penang.

(3.) Patta márpu sápalu (Madras handkerchiefs): 8 squares of 3 feet each: containing a brilliant mixture of red, yellow, blue, green, and purple.

These are exported to London, whence they are said to go to France, the West Indies, America, Arabia, and Africa. The American negroes are intensely fond of them as turban cloths, and Madras handkerchiefs are often referred to in *Uncle Tom's Cabin*, and other similar works as part of the head adornment of a negro slave. In Singapore and Penang the natives use them as undergarments, and in France and America, the Madras merchants assert, ladies make fancy dresses of them.

The Patnulkar silk weavers buy all their silk in Madras, as it is not now produced in the district. They prepare the warp, and weave, in

the way already described, but generally prepare a separate warp for each woman's cloth. One viss of silk costing Rupees 18 is required for this; dyeing it costs Rupees 2, arranging it Rupees 3, and as the silk loses a third of its weight in the cleaning, and the cloth sells at one rupee a pallam for the remaining 26 pallams, only Rupees 3 is left as wages for 15 days' weaving, or 3 annas a day as in the case of other weaving castes. The wasted silk however is sometimes cunningly worked up with the good, and is always used in twisting the waist threads (aruna kour; molthádu) worn by men. This slightly enhances the weaver's profits.

DYEING

This is chiefly practised with silk, the colours produced being fast and really brilliant. The processes are as follow:—

The raw silk (kórá paṭṭu) is, when brought, of a yellow colour. After being arranged for the warp it is boiled for three hours in water containing soap or fullers' earth which bleaches it to a pure white. During this process one third of the silk is wasted. The following colours are then applied; where quantities are stated they are those required to dye 2 viss of raw silk:—

Dark blue (nalla, Telugu; karupu, Tamil).—The white silk is soaked in indigo.

Scarlet (yerra, Telugu, segupu, Tamil).—The silk is soaked for six hours in water containing one maund of jungle lac (kombarakkū) and half a viss each of turmeric and alum.

Copper brown.—The red silk is soaked in indigo, or the dark blue silk is boiled in water containing $\frac{3}{4}$ maund of jungle lac, and $\frac{1}{4}$ viss each of alum and turmeric. The latter mode is preferred.

Dark Violet or Mauve (mégavarnam).—The dark blue silk is boiled in water containing chunam and fullers' earth.

Orange (kapila varnam).—White silk is soaked for two or three days in water containing $1\frac{1}{2}$ viss of kapila powder (a dragon's blood coloured powder, which is sold by the Malayálies) and half a maund of fullers' earth.

Golden (nemmali varnam).—White silk is soaked for five days in water containing $\frac{1}{2}$ maund of turmeric, and also some fullers' earth.

Crimson (kariminji).—For this colour are used the dried bodies of small insects (cochineal) called kiriminji, imported from Hydrabad where they are said to feed on the prickly pear. They are very expensive costing Rupees 8 per viss; for 2 viss of silk $1\frac{1}{2}$ viss of kiriminji is used. White silk is boiled with this in water, on two days, for three hours in each day.

Olive Green.—Dark blue silk is boiled in water containing alum, turmeric and fullers' earth; cotton cloths are also extensively dyed by the Rangaries in Wallajapett. The ordinary colours are black, red and yellow. The cloth is first soaked in water containing a sort of fullers' earth, called buggácháram, and oil in equal quantities. The mixture is milky in appearance, and in it the material is soaked, and dried over and over again during eight days. On the ninth day it is dipped into water containing milk and powdered gall nuts (karakáya pindi or flour of *Terminalia chebula* nuts) and then dried, when it is found to have assumed a greenish hue, and to have become stiff. To render it pliable, it is beaten upon a stone with a mallet, and is then ready to take the dye. The red colour is produced from splinters of the wood of a tree called virathungi, which are ground into a powder, and boiled in a pot. Then alum and gum are added, and the dye is ready. For black sulphate of iron (anabhédi), gum, and the seeds of the marking nut (*Semicarpus anacardium*) are mixed with water. Yellow is produced from turmeric. These colours are often printed upon cloth, yellow and red being applied by means of carved wooden blocks, and the black upon engraved copper plates. In this way patterns of birds, flowers, &c., are cleverly applied. After being coloured the cloths are washed in a tank or river, and then boiled for five hours in a large copper, containing water with four maunds of the root of the nóna tree, one maund of the root of the pobbáku tree, and about 1½ viss of oil. The cloths are gently stirred to prevent scorching, and the boiling is repeated a second time after the cloth has been dried. They are then washed and left to soak for one night in a mixture of sheep's dung and water, after which they are washed and dried several times during three days, and finally starched in conjee water.

A Rangari usually dyes about 300 yards at a time and the process occupies 20 days, the value of the dyed cloth being about Rupees 90. His expenses are—

	Rs.	A.	P.
300 yards of cloth	48	0	0
Oil	2	0	0
Nóna root	15	0	0
Pobbacháram root	0	8	0
Gall nuts	1	0	0
Fullers' earth, gall nuts and milk	0	8	0
Firewood	1	8	0
	68	8	0

yielding a profit of Rs. 26-8-0, but out of this he has to spend some Rupees 8 or 10 upon coolies to assist him in the various washings and boilings.

Weavers often dye their own cotton thread a dark-blue colour thus:—Equal quantities of chunam, paddy husk, and fullers' earth are put into a pot having a small hole in the bottom. This is placed over an empty pot, and water being poured over the materials, drains through

the hole in three days. A viss of indigo is next mixed with water in a large pot (kadava), and in a smaller one some seeds of the thagar plant are boiled, and the decoction added to the indigo. To this the lime water is also added, and the mixture is allowed to stand for four or five days, being gently stirred now and then. It ferments, and finally assumes a sort of copper colour, when it is ready to receive the thread, or cloth, which is dipped into it twice a day, for five days. Ten boxes of thread weighing 15 viss can be thus dyed for Rupees 20. The indigo costs Rupees 15, and the thagara seeds Rupees 1-8-0, leaving a profit of Rupees 3-8-0 for a month's labour. By using more than one kadava a man who devotes himself to dyeing for weavers of course increases his income.

Thread is dyed red in the following way. A quantity of milk hedge is burned to ashes, and added to water with half a viss each of sheep's dung, and gingelly oil, produces dye enough for one box of thread, from which three women's cloths can be woven. During twenty days, the thread is dipped in the red dye, and dried over and over again. It is next twice dipped in a decoction of alli leaves, being dried between the dippings, and finally steeped in a mixture of water and sirinji bark powdered.

CARPETS.

In Wálájápet a few silk carpets are made, in the colours already mentioned as being applied to silk. The thread is twisted five times as thick as for cloth weaving, and a carpet weighing a maund fetches Rupees 300. The cost is—

	RS.
Silk 1 maund	150
Dyeing	50
	200

The time occupied is about four months, and usually four or five assistants have to be paid Rupees 50 or 60 for the four months, leaving a profit of only Rupees 40 or 50.

Excluding the Vellore Jail, woollen carpets are only made to any extent in Wálájápet, and there generally of a poor quality, though better and cheaper than those of Bangalore. The very best can, however, be made if ordered. The wool has to be got from as far as Gudiyátam, or Palmanér, where the Kurrubas sell it. It is first carded, and spun into a thick thread, and then dyed various colours. Some of the processes described for silk are also applied to wool. The carpet loom is arranged perpendicularly. The warp is of twine, and the woof of wool. To the

twine are tied small pieces of coloured wool, between each thread of the woof, and are cut with scissors so as to present an even surface. The expenses of working are—

	Rs.	A.	P.
One maund of wool	1	12	0
Carriage	1	12	0
Dyeing	1	0	0
	4	8	0

This produces, after two or three days' work, a carpet 6 feet × 3 feet worth from Rupees 5 to Rupees 6.

Tent carpets, and jamkánas are also made in Wálájápet, both in horizontal and perpendicular looms. They are made of thick country cotton thread, imported from Bellary and Salem. The usual size of jamkánas is 2 yards × 1 yard, selling for Rupees 2-4-0 each. Twenty of these can be woven in a month by one loom, at the following cost :—

	Rs.
25 viss thread	30
Dyeing blue and red	5
	35

leaving a profit of Rupees 10, out of which probably an assistant for part of the time has to be paid.

CUMBLY WEAVING.

These are made only on the plateau, and in parts of Gudiyátam and Chittoor. The wool of thirty or forty Kurrumba sheep at a shearing yields about 26 seers, sold for a rupee, and enough to make eight pieces, two pieces being stitched together to make an ordinary cumbly worth a rupee or a rupee and-a-quarter. The warp is sized with tamarind seed conjee, and the loom set up on the ground, the workman sitting in a pit dug out for the purpose. His earnings do not exceed 2 or 2½ annas a day.

GRASS MATS.

These are made by Labbays and Mussulmans, chiefly at Wandiwash out of a reed called kóré, which grows by the side of water channels, rivers, and pools, but is also cultivated upon wet land, and requires as

much water as paddy. It is propagated by separation of the roots, and each plant lasts for ten years, yielding a crop of reeds once in every six months. When cut each reed is split, and the whole being sorted according to sizes, is tied into bundles and stacked.

There are four kinds of kóré, viz. :—

Manikoré, which is the finest and thinnest.

Vengáyapu koré, not quite so thin, but lighter than the above.

Kalkoré.—A coarse kind found by the margin of pools: it is more brittle than the first two sorts, and is often mixed with them for economy's sake.

Uppunkoré, not grown in the district, as it occurs only by the side of salt marshes. It is not split, and is used only for coarse mats, or for thatching houses.

The reeds are dyed red, black and yellow. After being split they are first soaked in water for a night, dried, and then moistened again before the colours are applied. The red dye is produced from splinters of "varthangi" wood (resembling red wood) and powdered leaves of the 'kasan' tree. A little of these mixed is sprinkled over each handful of reeds, which are twisted together and stuffed into a large pot of water. After soaking for a night, they are boiled in this pot for a short time on two consecutive days, by which time the colour has thoroughly penetrated. Sometimes alum and gingelly oil are added in the boiling, to intensify the colour.

For black the dross from a blacksmith's forge is powdered and mixed with annabhédi (sulphate of iron), gallnut powder, and the pods of the karivélan (bábul) tree. These are boiled together in water, and red dyed reeds are soaked in the decoction for a night.

For yellow, turmeric is used. It is powdered, and made into a paste with water, and a little castor oil. Each reed is smeared over with some of this paste, and boiled with red dye water.

A very simple kind of loom is employed, and aloe twine used as the warp, from fourteen to thirty six strings going to a span's breadth, according to the fineness of the mats. These are usually woven in pieces 6 feet × 3 feet, but the breadth can be increased to 4 feet if required, and there is no limit to the length. Two coarse mats of the usual size can be woven in a day; the coarsest sell for 2 annas each, and the finer sorts, with a simple coloured pattern vary in price up to Rupees 2. A few of the more skilful workmen introduce the figures of animals, flowers, &c., into the pattern, and such fetch as much as Rupees 7 each.

A cart-load of reeds containing twenty bundles, and sufficient for some two hundred mats, is bought for Rupees 40 or 50. The earnings of the workmen do not exceed as a rule 2 or 3 annas a day. Women gather, split, and prepare the reeds, earning by this means an ordinary day's cooly. Before the South Indian Railway was opened Wandiwash mats were largely exported to Madras, but the trade has been greatly reduced by the competition of the better kinds made in the Tinnevelly District.

BRASS UTENSILS, &c.

This industry is chiefly carried on in Vellore and Tirupati. The commonest articles produced are brazen water pots. These are made of thick sheet brass, bought in Madras. Each pot is made in three pieces; a circular portion is cut from the sheet for the bottom, and two rectangular pieces for the middle, and mouth. These are heated, and hammered into shape upon an anvil, and when properly fitted are soldered with *velligaram* (borax and bell metal), the seams being finally filed out, and the pot smoothed, and ornamented with lines in a lathe. The workmen (Kammálas) generally work on advances receiving Rupees 4-8-0 for a maund of metal used. Out of this they pay for charcoal, solder, and wastage of brass about Rupees 2, and therefore earn in a week, the time occupied in working a maund, about Rupees 2-8-0, or 6 annas a day. The trader sells the pots in his shop, or sends them in a cart to be hawked about the villages, at about Rupees 16 a maund.

Out of thinner brass ornamental plates are made in both Tirupati and Vellore. The sheet is cut and hammered into shape upon moulds. A device is next traced upon it in ink, and the lines cut with chisels or punches. In Vellore the plates are often perforated, and at Tirupati small pieces of silver and copper are inlaid. The profits are about Annas 6 a day, the price of the Tirupati ware being Rupees 1-12-0 per seer *plus* the value of silver inlaid. At Tirupati, vases, &c., are also engraved and inlaid, the vessels being in that case not hammered, but cast. A model of the interior of the vessel is first formed of clay and is covered with wax to the thickness intended for the brass. Clay, taken from a white ants' nest, is then carefully powdered and laid over the wax, and finally a coat of coarse clay is added. When it has dried a small hole is bored, reaching to the wax, which being melted over a fire is poured out. The mould is then heated in a furnace, and, while hot, molten brass is poured in, filling the space lately occupied by the wax. After being turned in a lathe the vessel is filled with lead, and engraved with chisels and punches.

Idols are cast in the same manner. A sástram describes the proportions of each limb of the various idols, and the auspicious days for moulding them. On those days the waxen images are made, and being corrected in subsequent days, are covered with clay as already described. The usual mixture used is 1 maund copper, ½ viss lead, and 1½ viss tin, but gold and silver are sometimes added to order. The prices of idols, (which make excellent paper weights,) are—

	Rs.	A.	P.	
Cast in brass	0	6	6	per seer.
,, ,, copper	1	4	0	,,
,, copper and ornamented with brass.	1	12	0	,,

The profits of this work amount to about Annas 8 a day.

GLASS AND BANGLES.

This manufacture is confined to a few villages in the Kálahastri Zemindari, where the saline efflorescence of the soil, called "soudu man," is very plentiful. It is collected, generally in February and March, and placed in pots containing about six Madras measures each. Sixty of these are built into a large clay furnace, and baked for some time, until the contents have been fused into a white glass called "gázu rai." The soil mixed with the soda is found to supply the necessary amount of quartz. The "gázu rai" is powdered, and mixed with various substances to give it colour: thus a blue powder, said to be brought from Benares, produces blue glass (nílam rai), copper filings make it green (paccha rai), a black stone (nalla rai), obtained from Conjeeveram, produces a blue red (ûtha rai), and another stone (chembadi rai), from the same place, turns it to a reddish hue (sonné rai). The coloured glass is again broken, fused once more, and bent with an iron style into the shape of bangles. Bangles are made elsewhere than at Kálahastri, from whence however the glass is alone obtained at the following prices:—

	Rs.	
Blue	20	per kandy.
Green	16	,,
Blue red	14	,,
Red	16	,,

Bangles are sold at from Annas 2 to 5 per gúthi of 500, and are very largely exported from the district. The trade is in the hands of the Balija caste, who also make bangles of lac, well mixed with powdered clay. This mixture is warmed, and cut into strips, which are moulded upon a circular stick held over a charcoal fire. Gold leaf, coloured glass, tinsel, &c., are fastened upon them while still heated. Such bangles are sold for from 6 pies to 2 annas per bundle of nine.

POTTERY.

The ordinary pottery of the country is produced in every village, and needs no description, but at Karigeri, in the Gudiyátam Taluk, a superior quality is produced by one family. It is made of a sort of pipe clay powdered, mixed with water, and strained through a coarse cumbly. When dry it is again ground, moistened, and fashioned upon the ordinary wheel. After being dried for ten days in the shade, and for two days in the sun, the vessels are baked for twelve hours, being placed in an earthenware closed oven, which is covered with fire, built

over with clay. After being baked they are glazed. Equal parts of zangála pacché (verdigris) and bangle earth (soudu man) are fused in a furnace, until they form a green glaze. This being powdered, and mixed with water is painted over the vessels, which are then dried in the sun, and baked as before. If the baking has been properly regulated a rich green glazed surface is the result. If half a part of white lead be added to the verdigris and bangle earth a yellow glaze is produced. In either case when the baking has been too prolonged, the glaze assumes a blackish red colour.

The articles produced at Karigeri are much admired both in India and England. Goglets, butter dishes, flower-pots, in fact any shape desired are turned out at various prices. As the manufacture is a monopoly they are high; a glazed goglet costing about a rupee and-a-half and other things in proportion. They are unfortunately very brittle.

RED SANDERS WOOD CARVING.

This is confined to Tirupati and its neighbourhood. The wood is bought from the Bálapalle jungles of Cuddapah at Rupees 2½ for three men's loads (about seven maunds). This is turned into plates, cups, &c., sold for a few pies, and carved into idols, which when elaborately carved are very expensive.

Lac coloured toys are made in Vellore out of a very light and white coloured wood called vépálé. This is turned into the shape of cups, bottles, goglets, toy locomotives, &c., and while revolving in the lathe sticks of various coloured lacs are applied to the surface. The heat of friction melts the lac, and causes it to adhere to the wood with a polished surface. These toys are very cheap, and admirably adapted for children as the colour does not come off.

PAPER.

A little of this is now made in the district in Lálapett and a few other villages, but not many years ago it was extensively produced, one village near Vellore, called Káyithapatteda, being the chief seat of the industry. It is made from worn out gunny bags, which are cut to pieces and washed. The rags are then soaked in chunam and water for 24 hours, and again washed. This is repeated four or five times, and finally the rags are beaten into a pulp with mallets. The pulp being

put into a tub of clean water is well stirred, and allowed to settle, after which the water is poured off. The implements next used are a flat board and a frame of wood across which thin and parallel strips of rush are fastened. The frame being dipped into the pulp, brings away a portion of it adhering to the rushes. This is transferred to the board, which is tilted from side to side until the pulp lies evenly, and then the water is allowed to drain off, and the board being turned over upon a smooth chunam platform, leaves the sheet of paper lying moist upon it. Other sheets are made in the same way, and placed one upon the other, for they do not adhere though still moist. When all the pulp is used, the pile of sheets is pressed between boards, and then each sheet is dried separately upon strings. They now form very fair blotting paper, but for writing purposes are dipped in rice conjee, dried, and polished with smooth stones.

OIL-PRESSING.

This manufacture is altogether in the hands of the Vánias and Gándlas and is extensively carried on all over the district. The seeds from which oil is usually expressed are gingelly and ground-nut. The latter oil is only used for lamps. The mill is formed of a portion of the trunk of a large tree planted on the ground and hollowed out into the form of a large mortar. In this a big pole works as a pestle round and round, being drawn by one or two bullocks, yoked to a projecting spar. Above the ghauts the mortar is sometimes made of granite. To eight measures of the seed one-eighth of a measure of water is added when beginning work, and half the amount for every separate charge of eight measures. To improve gingelly oil sometimes jaggery, lime juice, and cocoanut milk are also added with the water.

The mill costs about Rupees 55, and a pair of good bullocks about Rupees 80. With this stock, the mill may be worked early and late, pressing in a month 1,500 measures, or about 5,000 lbs. of gingelly seed, worth in ordinary times some Rupees 250. From this 75 maunds of oil will be yielded, which at Rupees 4 per maund is worth Rupees 300, giving a profit of Rupees 50, out of which have to be paid Rupees 20 for feeding the cattle, and something for repairs, and the wear and tear of stock. The monthly profit would therefore not exceed Rupees 20 or 25 *plus* the value of the oil cake worth about Rupees 7 or 8.

Ground-nut oil is cheaper than gingelly, but the profits of expressing it about the same. Kánaga oil is only manufactured above the ghauts where it is very cheap but only used for lamps. In these it gives a poor light, and much smoke, irritating to the eyes and productive of headache. Below the ghauts the berries of the neem tree and the seeds

of the ilupa, are used to produce a cheap oil instead of the kánaga. Croton berries are, like castor oil, boiled to obtain oil.

TANNING.

This is chiefly in the hands of the Lubbays of the Arcot and Gudiyátam Taluks. Chucklers in various parts of the district prepare leather, in a rough way, with chunam and barks, but the best is made by the Lubbays. Their *modus operandi* is as follows:—Hides are tanned fresh, or cured with salt, which preserves them for a month or two. Fresh hides produce the best leather, but often they cannot be got in large numbers. About a hundred hides are tanned together, being first placed in a large vat containing water, to which 50 or 60 measures of chunam have been added. They soak in this for ten days, being taken out each day, and replaced after the liquid has been stirred. After ten days the hair is easily scraped off with a blunt two-handled knife passed over them as they lie upon a flat board. On the next day, after a thorough washing, the inner surface is well scraped with the same knives. Another good soaking is followed by another scraping of the hair side, and finally all the hides are well trodden out by men in a large vat of pure water, to remove as much of the chunam as possible. They are then considered clean enough to be tanned. The bark of the aváram tree (*Cassia auriculata*) is used for this purpose, and 50 maunds or more of it are used for 100 cow hides. Twenty maunds of the bark are first soaked in the tan vat for from six to ten hours, and then removed. The hides are then carefully arranged so that two are succeeded by a layer of the bark, which has been soaked. The whole mass is removed once a day, and repacked as before for ten or eleven days, after which the whole process is repeated with another twenty maunds of fresh bark, for ten or eleven days more, and again for a third period of the same duration, but with only ten maunds of bark. At this stage, the leather is tested, by an experienced tanner, with a knife. If it cuts properly it passes under the next process, if not more bark, according to its immaturity, is used, for a few more days. When the leather is ripe it is washed, and the inner surface again scraped, after which five maunds of gallnut (*Terminalia chebula*) are powdered and scalding water is poured over it. Into this liquid each skin is well dipped, and then laid out in a vat, the balance of the gallnut water being finally sprinkled over the heap. After a day the skins are repacked, and on the next day are taken out, and found whitened by the process. They are then oiled, a mixture of two parts fat and one part gingelly oil, well heated and mixed, being rubbed into the inside, and pure gingelly into the outside surface. A common cooly will thus

oil twenty cow hides in a day, the effect being to make the leather supple and glossy. For a day the hides are dried in the shade, and afterwards stretched, and rubbed with a stick having a smooth copper head. A final polish with smooth stones is given, and then nothing remains but to trim and dry them. At various stages in tanning, hides, especially cured ones, are spoiled and rejected. The ordinary cost of tanning a cow hide is about a rupee and for a sheep or goat skin three or four annas. The latter are rubbed on both sides with gingelly oil alone, and are tanned with half as much bark, and in half the time, needed for the thicker hides of cows or bullocks. Leather is always sold by weight, a good price per lb. being five to seven annas for cow hides; fifteen annas to Rupee 1-2 for goat skins, and 9 annas to 15 annas for sheep skins, but prices are sometimes 25 per cent. lower than this. The profits depend upon the amount of work done, being about 20 per cent. on the value of the leather tanned.

PRINTING.

There are six presses at work in North Arcot, viz., three at the Collector's Office in Chittoor, and one in the Vellore Jail printing in English, Tamil, and Telugu. Another belonging to a native in Vellore prints in Tamil and Telugu only, and the last, the property of the Kárvétnagar Zemindar, does a little work in Telugu for him alone.

The first press ever used in the district was imported by Mr. Bourdillon, then Collector, in 1853, and was worked in his office at his own expense. Four years later the Sub-Collector Mr. Sullivan followed the Collector's example. In 1856 the first District Gazette was published. Prior to that year the press at Chittoor had been used for striking off circulars, copies of important regulations, and notifications of general interest for distribution among village officers.

CHAPTER VII.

CIVIL ADMINISTRATION.

UNTIL 1805 the Collector of the district alone exercised civil jurisdiction, an appeal lying from his decisions to the Board of Revenue. In 1805 the judicial system of Lord Cornwallis was introduced, and a Provincial Court, a Zilla Court, and a Native Commissioner's Court were established. The jurisdiction of the last extended to suits regarding money, or real property, of value not exceeding Rupees 80. An appeal lay from the Commissioner to the Zilla Court presided over by the Adaulut Judge, who was assisted by a Registrar, a Pundit, a Mufthi, and a Native Registrar. The first three were empowered to try cases referred to them by the Judge, but the last was merely his assistant employed in reading and explaining vernacular records. The Court was held in the present Police Office at Chittoor. Appeals from the Zilla Court went to the three Judges of the Provincial Court. This had jurisdiction over the districts of Chingleput, Cuddapah, and North Arcot, but was held at Chittoor in the present District Court House. The Judges were assisted by a Registrar who was a Covenanted Civil Servant, a Pundit, Mufthi, and Kházi. The last three merely expressed their opinions upon questions of Hindu or Mahommedan law submitted to them by the Judges.

Regulation VI of 1816 abolished the Commissioner's Court and brought into existence those of District Munsifs established at Chittoor, Venkatagiri, Vellore, Tiruvettúr, Tirupati, and Sholinghur. The Tiruvettúr Court was subsequently moved to Arni, and that of Venkatagiri to Gudiyátam, and thence to Palmanér.

In 1843 the Provincial and Zilla Courts were abolished, and in their stead the Civil Court, and Subordinate Judge's Court were established. The latter continued until 1860, when it gave way to the Court of a Principal Sudder Amin. Two years later this was displaced by a Small Cause Court, which was held at Vellore until April 1877, in which year it was abolished.

The District Munsifs' Court had meanwhile been reduced in number, that of Vellore being closed in 1868, but restored in 1877 upon the abolition of the Chittoor District Munsif's Court.

At present the Civil Courts of the district are the Civil Court and five District Munsifs' Courts subordinate to the former. The jurisdictions of the District Munsifs are as follows:—

Tirupati.—Chandragiri Táluk, Kálahastri Zemindari, and Náráyanavanam Taluk, of Kárvétnagar.

Sholinghur.—Wálájá Taluk, and the Pallipat and Tirutani Taluks of Kárvétnagar.

Palmanér.—Palmanér and Gudiyátam Taluks, with the zemindaris of Punganúr and Kangundi.

Vellore.—Vellore and Chittoor Taluks.

Arni.—Arni Jaghire and the taluks of Arcot, Pólúr, and Wandiwash.

The Courts are upon the whole self-supporting. The only one which is not so is the Civil Court; but, as the Judge has criminal as well as civil jurisdiction, the fees received may be considered as nearly equivalent to the cost of civil administration even in this Court. The receipts and expenditure in each Court in 1876 were as follows:—

Courts.	Cost of Establishment.	Court and Process Fees.
	Rs.	Rs.
Civil Court, Chittoor	37,780	18,484
District Munsif of Tirupati ..	7,509	10,315
Do. do. of Sholinghur ..	10,006	15,613
Do. do. of Palmanér ..	7,388	7,661
Do. do. of Vellore	9,416	16,672
Do. do. of Arni	7,848	11,978
Total ..	79,950	80,756

There are moreover 3,700 Village Munsifs in the district exercising jurisdiction in villages under Regulation IV of 1816 over suits not exceeding Rupees 10 in value. Very few of them, however, make use of their powers as will appear from the subjoined table:—

Years.	Number of Munsifs who exercised powers.	Number of Suits filed.
1873	138	1,788
1874	155	2,014
1875	184	2,442
1876	197	3,419
1877	199	2,850
1878	165	2,140

The operations of the Civil Courts and the value of the suits tried will be found in the appendix.

Civil powers are exercised by the Collector and his Assistants under

Regulation VI of 1831, and Act VIII of 1865. By far the largest number of suits tried under the Act are filed in the Court of the Head Assistant, in whose charge are the large zemindaris of Kálahastri and Kárvétnagar. Almost all the suits in this division are from the Kárvétnagar estate.

CRIMINAL JURISDICTION.

The Zilla Judge, appointed in 1805, was also District Magistrate, who tried simple cases and committed the more serious ones for trial by the Provincial Court. One of the three Judges of this Court itinerated and held a jail delivery, once every month, in the three districts subordinate to the Court. Dárógas and Tánadars were also empowered to commit cases for trial.

In 1816 the Zilla Judge was relieved of Magisterial power and the Collector was made District Magistrate. In the same year the offices of Tánadar and Dáróga were abolished, and their powers transferred to Tahsildars and Police Amins.

The Criminal Courts now existing in the district are—

One Sessions Judge at Chittoor

One District Magistrate at Chittoor.
One Joint Magistrate at Vellore.
One Head Assistant Magistrate at Ranipett.
One or two Assistant Magistrates at Chittoor.
One Deputy Magistrate at Arni.

[All these Magistrates (except very junior assistants) exercise full powers.]

Nine Tahsildar Sub-Magistrates at their cusba stations exercising second-class powers.

Nine Taluk Serishtadar Sub-Magistrates, also at cusba stations, exercising second or third class powers.

Eleven Deputy Tahsildar Sub-Magistrates, of whom seven are in zemindari tracts and four in the larger Government Taluks, exercising second or third class powers.

Statistics exhibiting the work done by all the above courts will be found in the Appendix.

POLICE.

Under native rule in North Arcot the Mén-kávelly system of police was in force. By this an officer styled Mén-kávelgár was appointed to [illegible] of country, with village watchers called Kávelgárs,

Talliáries, or Vetties, who under his supervision discharged police duties. In the zemindaris and páliems the owners of the states were themselves the Mén-kávelgárs. The fundamental principle of the system was the responsibility of the watchers for all losses by theft or robbery, a responsibility enforced, upon complaint, by the Mén-kávelgár, who, upon the other hand, used his influence in enforcing the payment of fees due by the residents of villages to the local watcher.

The emoluments of the watchers and their officers were of two kinds, viz., assignments of rent-free lands and the payment of fees by ryots and non-agricultural villagers. In the taluks north of the Pálár alone the assessments of the lands so assigned amounted to Rupees 97,735, the fees payable by traders and artisans to Rupees 18,645, and the ryots' harvest fees to Rupees 38,575, making a total of upwards of a lakh and half.

When the Carnatic was ceded to the Company this system was in full force in all the Government taluks, but in the estates of the Zemindars and Poligars various abuses had crept in. The Zemindars being under obligation of military service had enrolled many of the watchers, for the sake of economy, in their Kattubadi, or semi-military, force, and the Poligars, eager to imitate the magnificence of their more consequential neighbours, had done the same, so that in these estates a vast proportion of the village watcher body was returned as belonging to the Kattubadi force. When the Zemindars were relieved of their liability to military aid, the services of the so-called Kattubadies were dispensed with, and the estates in consequence left with hardly any watcher establishment, an inconvenience which still exists.

In all the Government taluks, on both sides of the Pálár, the Mén-kávelly system was abolished in 1803, and the Collector of the Northern Division appropriated the portion of the revenue thus made available to the establishment of a small force of peons at an annual cost of Rupees 35,000. But many of the Men-kávelgárs had entertained watchers of their own, and these, upon the resumption of their employers' lands, naturally ceased to do duty, nor were their places filled up. "By this step not only many village watchers lost all their emoluments and ceased to serve, but the resources of others were seriously impaired. The then really influential and respected officers of the large body of village watcher privates were entirely set aside. The village watcher lost the support of an influential baron in recovering his dues, and the people lost the guarantee of an appeal to a man who could enforce from the village watchers a punctual and effective discharge of their liabilities and duties—men, in short, who had been kept to work frequently by the lash and by a sense of heavy pecuniary responsibility found themselves discharged alike of control and liability, while the ryot on his part withheld payment of fees for a service which was indifferently rendered. The service was neglected, and the fees justly due to the village watcher

became less and less punctually paid. The watchers helped themselves to their neighbours' goods."[1]

Thus inefficiently did the village watchers discharge their duties under the supervision of the Tánadárs of the Police peons entertained by the Collector in 1803. In 1808 the control of the whole body was transferred to the Judge, who was then the District Magistrate. No improvement, however, resulted from the measure, and in 1813 the Judges of the Provincial Court, Central Division, remarked upon the incompleteness of the force, the inadequacy of their pay, and the inefficiency of their service, adding that it was becoming yearly more apparent that the watchers were themselves concerned in much of the crime which occurred. In order to impose a closer supervision, the duty of superintending them was once more transferred to the Collector, and the watcher placed under the village monigar. Though on the whole the change was productive of increased efficiency, one consequence of it was that the watcher body lost much of its police character, and "readily exchanged night patrol for the easier duty of collecting the revenue." Another inconvenience experienced in exacting service was found in the undue application of the hereditary principle to the emoluments of the office These had been treated as ordinary heritable property and divided among the various branches of the merási family, the members of which performed the duty by turns. The lands were sometimes subdivided permanently, and sometimes rotated with the obligation of service, which fell not only upon those personally fit, but upon women and children.[2] "This state of things is of course to be traced to the great principle of native police administration, that of responsibility for losses by theft, without much account being taken of individual fitness for active exertion so long as those liabilities were met, it did not much matter whether the fund from which they were to be made good was in an old woman's or an infant's hand."

Though these defects were early recognised it was not until 1858 that any scheme for the complete separation of police and revenue duties was elaborated. In that year Mr. (now Sir William) Robinson, as Chief Commissioner of Mofussil Police, submitted proposals for the establishment of a new police force. In addition to enlisting a regular body of constables, he proposed to re-officer the talliáries by dividing the whole district into village circles, and appointing a village inspector to each, subordinate to the Police Inspector of the taluk, but otherwise unconnected with the constabulary force. This arrangement was approved, but was discontinued in 1862 after it had been in operation for nearly three years.

Mr. Robinson pointed out that the Mén-kávelly fund of this district was incorporated with the revenue, and did not probably fall short of

[1] Report of Commissioner of Mofussil of Police dated 1858.

[2] One of the village tálliáries of the town of Tiruvettúr is even now a very determined old woman who discharges her duties most efficiently, and boasts of having arrested and secured many of the thieves detected by her in crime.

Rupees 1,20,000. In the Zemindaris of Kálahastri and Kárvétnagar all the emoluments of the Kaṭṭubady and Amaram peons were, in 1803, resumed, and a large addition to the peshcush made in lieu of all military services. Thus the funds for the restoration of the local police were to be found in the peshcush now paid by those zemindars. Elsewhere, where Kaṭṭubadies still existed, he proposed to relieve them of service, and to enfranchise their inams, utilising the revenue thus obtained (about Rupees 44,000) in the reorganisation of the village establishments.

These proposals were approved and carried out in September 1859 with the best results. Though not immaculate, the police force discharges its duties as efficiently as can be expected from a body of men having small pay, great temptations, and many opportunities for oppression. The present sanctioned establishment and its cost are exhibited below :—

Rank.	Pay per Month.	Sanctioned Strength.	Cost per month.
	Rs.		Rs.
Superintendent	700	1	700
Assistant Superintendent ..	500	1	500
Inspectors, 1st Class.. ..	215	2	430
Do. 2nd do.	165	3	495
Do. 3rd do.	115	4	460
Do. 4th do.	85	5	425
Do. 5th do.	60	7	420
Do. 6th do.	47	2	94
Sub-Inspectors	30	5	150
Chief Head Constables ..	55	1	55
Head Constable, 1st Grade ..	25	12	300
Do. 2nd do. ..	20	37	740
Do. 3rd do. ..	15	39	585
Do. 4th do. ..	12	60	720
Constables, 1st Class ..	8	338	2,704
Do. 2nd do. ..	7	338	2,366
Do. 3rd do. ..	6	336	2,184
Total ..	..	1,191	13,328

The district appears at all times to have been noted for its crime. Most part consists of wild and hilly country, which afforded easy means of retreat and secure harbour for depredators, and almost every taluk bordered upon a foreign state, a different district, or a disorderly zemindari. For many years the zemindars were entrusted with the supervision of the police in their estates, as well as with magisterial authority, but as early as 1815 the magistrate reported that they exercised their authority "with but feeble cognisance or control from higher authority and there is reason to suspect that the source of justice is here completely tainted." The arrangement was, however, continued for upwards of a quarter of a century longer, and then gradually brought to a close. In 1831, when Government proposed to reduce the police establishment, a melancholy picture was drawn by the magistrate of the condition of crime in the district. Dacoities were of frequent occurrence, and the gangs

which collected often far outnumbered all the available police in the neighbourhood. Notices, signed "Subadar of the torch-light robbers," were found posted near the houses of the wealthy, announcing that unless the owners delivered up their property upon a certain night, death would be the result. The robbers moved about in bands, apparently coming originally from other districts, and so little confidence was felt in the police that their demands were often unresistingly complied with. Though no other district had so many populous towns, the magistrate complained that none had so small a body of police. This appeal had the desired effect of averting the threatened reduction of the force, and small additions were from time to time made; but crime continued comparatively unchecked for many years, and men, hardly past middle age, even now narrate how the leaders of robber bands entered Chittoor and other large towns in palanquins, attended by followers carrying torches, and looted with impunity the houses of the rich. But little of the crime, however, seems to have been reported, for the statement of grave offences from 1835 to 1839 is as follows:—

Years.	Number of Offences.	Detected.	Property lost.	Property recovered.
			Rs.	Rs.
1835	487	184	53,874	5,635
1836	404	137	98,767	43,067
1837	344	174	29,904	4,828
1838	434	191	43,350	13,827
1839	399	178	38,497	9,555

Probably only notorious cases and those in which detection was easy ever came to light. The figures from 1874 to 1878 are exhibited below:—

Offences.	1874.						1875.						1876.			
	Cases reported.	Cases detected.	Persons arrested.	Persons convicted.	Property lost.	Property recovered.	Cases reported.	Cases detected.	Persons arrested.	Persons convicted.	Property lost.	Property recovered.	Cases reported.	Cases detected.	Persons arrested.	Persons convicted.
Murder	30	7	35	8	27	...	32	9	56	11	128	51	31	9	65	12
Culpable homicide ...	17	7	40	20	...	...	23	4	81	20	...	...	22	2	30	2
Dacoity	22	3	64	25	1,620	262	21	3	63	10	8,093	93	165	29	843	140
Highway robbery ...	8	3	12	5	101	12	3	1	2	2	25	11	28	5	30	12
Robbery	54	17	47	28	803	158	33	7	31	7	901	10	83	12	75	20
House-breaking	490	159	335	205	35,114	3,656	445	108	257	143	46,389	4,163	755	227	768	413
Thefts	1,209	540	1,037	861	35,526	8,670	1,174	481	1,089	709	30,363	13,300	1,468	600	2,190	926
Cattle thefts	223	98	219	127	2,781	1,528	219	72	181	114	2,963	1,017	398	168	458	301

Offences.	1876—*contd.*		1877.						1878.					
	Property lost.	Property recovered.	Cases reported.	Cases detected.	Persons arrested.	Persons convicted.	Property lost.	Property recovered.	Cases reported.	Cases detected.	Persons arrested.	Persons convicted.	Property lost.	Property recovered.
Murder	221	18	58	20	133	30	404	35	45	8	91	17	1,227	4
Culpable homicide ...	...	...	41	11	95	22	1	...	30	4	69	8	...	...
Dacoity	17,701	533	317	79	1,453	386	46,837	9,228	85	23	400	89	15,709	1,058
Highway robbery ...	584	43	85	23	94	55	1,880	229	55	15	61	38	1,202	157
Robbery	1,246	102	147	44	188	89	2,281	311	77	24	94	47	1,202	187
House-breaking	37,061	1,280	2,114	1,200	2,238	1,038	74,014	12,446	1,127	587	1,036	750	40,120	6,700
Thefts	26,553	6,285	2,778	1,574	3,789	2,520	30,554	10,306	2,008	1,052	2,033	1,611	42,108	10,103
Cattle thefts	4,193	1,387	2,008	1,204	3,321	2,187	19,841	10,110	906	487	1,277	918	11,037	5,002

For accidental deaths the district has generally been one of the worst in the Presidency, the number of cases for each of the six years beginning with 1866 being respectively 727, 724, 722, 635, 800, and 859. Since 1871 there would seem to have been a small decrease except during the famine years 1877 and 1878:—

Persons.	1874					1875					1876					1877					1878				
	By Drowning.	Wild Beasts.	Snakes.	Railway.	Other Causes.	By Drowning.	Wild Beasts.	Snakes.	Railway.	Other Causes.	By Drowning.	Wild Beasts.	Snakes.	Railway.	Other Causes.	By Drowning.	Wild Beasts.	Snakes.	Railway.	Other Causes.	By Drowning.	Wild Beasts.	Snakes.	Railway.	Other Causes.
Men ..	59	3	12	1	35	85	..	18	1	46	67	4	25	14	61	192	2	14	11	109	152	5	15	4	86
Women .	164	..	12	..	12	187	1	16	..	16	144	1	20	..	10	340	1	10	2	12	331	2	6	..	23
Children	256	4	16	..	21	300	1	17	..	21	294	2	19	..	19	491	1	10	..	28	783	3	14	..	21
Total ..	595					799					680					1,223					1,445				

Many of these deaths by drowning are doubtless undetected murders, especially in the case of men. With women drowning is a popular mode of annoying relatives or obtaining release from bodily pain.

JAILS.

It is difficult to learn the early history of jails in the district. An inscription upon the walls of the Chittoor Jail records its construction in the year 1810. Prior to that there was probably a smaller building on the same site. Subsequently—but when cannot be discovered—another jail was opened in the Vellore Fort where the Civil Dispensary now stands. In the year 1867 a few sub-jails were constructed at some of the cusba stations, and the Fort Jail was given up as the Central Jail was opened. Gradually, in subsequent years, every Sub-Magistrate's station was supplied with a sub-jail, of which there are now nineteen in the district. Prisoners whose sentence does not exceed one month are confined in them; those sentenced up to a year are sent to Chittoor; and in cases of longer terms to the Vellore Central Jail.

Owing to the destruction of the records relating to sub-jails no statistics of the number of persons confined in them can be given. The largest jail in the district is the Central Jail of Vellore. It was first opened in March 1867 with 160 convicts. The numbers have greatly increased since, and the subjoined table exhibits the numbers confined during the last five years, the two last of which were famine years characterised by an increase of crime :—

Years.	Remained at beginning of Year.		Admitted during Year.		Total.		Discharged from all Causes during Year.		Remained.		Daily Average.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1874	938	31	305	23	1,243	54	308	14	935	40	925	32
1875	935	40	296	28	1,231	68	339	29	892	39	887	41
1876	892	39	434	18	1,326	57	353	24	973	33	927	35
1877	973	33	721	58	1,694	91	655	44	1,039	47	946	32
1878	1,039	47	304	46	1,343	93	282	49	1,061	44	1,064	51

Convicts sentenced to upwards of a year's imprisonment are confined in the jail from various districts of the Presidency as well as from Burmah, for sentences of transportation may be carried out in it. Many prisoners sentenced to transportation by the Courts of this Presidency are retained when considered physically unfit for deportation to the Andamans.

The annual expenditure during the same series of five years was as follows :—

Years.	Rations.	Establishment.	Police.	Hospital.	Clothing.	Contingencies.	Total.	Cost per Head.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS. A. P.
1874 ..	30,206	18,398	9,700	..	2,302	2,024	62,632	65 6 0
1875 ..	31,812	16,148	9,490	209	2,775	1,824	62,259	66 11 4
1876 ..	33,398	16,028	8,279	274	2.978	1,719	62,678	65 0 7
1877 ..	61,353	19,315	..	559	3,244	3,365	87,839	89 10 1
1878 ..	46,491	18,931	9,781	355	3,101	1,296	79,958	71 9 2

Much of this expenditure is recovered by the value of the convicts labour. The profits derived from this during the last four years of the above period were—

	RS.		RS. A. P.
1875	16,221	or per head	20 10 8
1876	35,195	do.	43 8 9
1877	26,061	do.	32 9 9
1878	45,447	do.	49 10 2

The chief industry carried on in the jail is weaving. A great variety of cloths of many patterns are woven, as well as table-cloths, gunnies, koré mats, carpets, &c. For its carpets the Central Jail is famous. The manufacture was first taught to the convicts by a carpet-weaver of Ellore, and is now handed down from one set to another. The fabrics are excellently woven and find a ready sale in England. Carpentry, shoe-making, iron and brass work, and tent making are also carried on, and the jail is well worth a visit. By extreme industry and good conduct convicts may earn a remission not exceeding one-sixth of the total period of imprisonment awarded them, and also gratuities upon discharge not exceeding Rupees 10. During the first sixth part of their sentences, each is kept under probation, from which condition he is, if well conducted, passed through three classes, and may then be made a maistry, and finally an overseer. One maistry is set over every twelve convicts, and one overseer over every fifty. The gradual progress through these various grades brings with it increased privileges in the way of writing to, and receiving letters from, relatives, or having personal interviews with them, so that every incentive to good conduct is held out. A series of statements relating to the jail, supplied by Major McLeod, who has been its Superintendent since November 1867, will be found in the Appendix.

The early records of the Chittoor District Jail have been destroyed, but statistics for seven years from 1870 are shown belo

Years.	Daily Average Strength.		Admissions to Hospital.		Deaths.		Expenditure.					Value of Work done by Prisoners.
							On Establishment.	On Rations.	On Clothing.	On Miscellaneous.	On Additions, Alterations, and Repairs.	
	M.	F.	M.	F.	M.	F.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1870	264·10	27·05	198	26	12	...	6,647	11,673	1,588	481	1,903	8,027
1871	217·85	23·97	166	20	5	...	6,911	5,757	1,102	579	522	6,959
1872	204·23	12·21	171	8	3	...	6,781	8,514	587	541	206	5,947
1873	185·75	14·31	260	7	1	...	6,060	4,797	517	487	730	5,870
1874	243·23	14·22	482	10	6	...	7,312	6,989	741	558	209	7,581
1875	159·17	10·37	314	13	6	..	6,257	4,781	137	538	119	5,281
1876	228·93	12·03	407	17	17	2	8,120	9,817	1,003	340	300	7,864

At present the convicts are only employed in road-making, jail conservancy, cooking, making and washing prison suits, and gardening. Formerly spinning, weaving coarse cloth, making country paper, mats, baskets, &c., were carried on, but were discontinued after the opening of the Central Jail.

LOCAL FUNDS.

The district is divided into two circles—that of Chittoor and that of Vellore. The former includes the country north of the Pálár, and the latter that south of the river.

The appended statements exhibit the receipts and expenditure of the two circles since the establishment. It must be remembered that the last two years were characterised by severe famine and distress.

Statement showing the Receipts and Expenditure of Local Funds,

	Receipts.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.
1	Balance	Rs. 33,957	Rs. —28,919	Rs. —26,363	Rs. 53,231	Rs. 1,00,552	Rs. 98,068	Rs. —71,105	Rs. —67,661
2	Allotment from General Revenues.	43,111	55,842	54,321	53,675	1,18,295	6,333	2,529	5,364
3	Rates and Taxes ...	93,430	1,21,887	1,73,032	1,85,301	1,59,730	84,421	1,30,713	1,82,263
4	Fees in Schools and Training Institutions.	...	...	...	...	340	482	739	1,339
5	Contributions from other Circles and Municipalities.	...	4,330	1,052	2,302	13,733	22,173	1,483	5,635
6	Receipts from endowments, contributions, and donations.	7,824	5,757	28,143	5,745	9,239	10,907	8,275	10,017
7	Miscellaneous ...	1,485	5,267	3,010	2,485	31,178	10,062	96,329	80,552
	Miscellaneous Debt Account.	684	199	702	10	46,875	..	2,570	486
	Total ...	1,80,491	1,64,363	2,35,457	3,02,839	4,79,942	2,32,446	1,71,533	2,18,095

Statement showing the Receipts and Expenditure of Local Funds,

	Receipts.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.
1	Balance	Rs. 16,815	Rs. 16,317	Rs. 48,292	Rs. 23,033	Rs. 27,941	Rs. 28,656	Rs. —11,292	Rs. 4,247
2	Allotment from General Revenues.	9,877	13,456	13,862	16,374	14,825	4,352	3,281	5,414
3	Rates and Taxes ...	51,492	76,832	66,845	81,232	94,246	62,473	53,870	1,48,536
4	Fees in Schools and Training Institutions.	...	...	...	...	212	226	434	1,138
5	Contributions from other Circles and Municipalities.	...	418	500	180	180	...	180	180
6	Receipts from endowments, contributions, and donations.	7,581	9,067	1,564	1,803	[illegible] 1,725	1,765	1,200	1,200
7	Miscellaneous ...	43	7,518	2,302	1,115	377	2,289	30,198	6,148
	Miscellaneous Debt Account.	318	30	1,400	...	...	...	...	7
	Total ...	86,126	1,24,238	1,34,765	1,24,337	1,39,5[illegible]	99,761	86,871	1,66,870

Chittoor Circle, North Arcot District, from the beginning up to 1878-79.

	Expenditure.	1871-72.	1872-73.	1873-74.	Total.	Average	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.
I	Public Works—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
	New Works ...	53,948	45,508	16,172	1,15,686	38,562	26,773	1,07,294	90,724	37,694	64,567
	Repairs	82,127	86,069	94,132	2,62,328	87,443	1,08,998	1,23,488	1,01,680	1,20,999	75,403
	Establishment ...	30,440	30,047	34,059	1,01,146	33,715	30,825	48,316	41,646	13,114	30,807
	Tools and Plant ...	1,286	1,630	2,365	5,281	1,760	...	1,829	855	5,743	3,081
	Refund of Receipts.	...	...	...	...	...	...	...	...	290	1
	Total ...	1,67,801	1,63,912	1,46,728	4,84,441	1,61,480	1,66,591	2,80,927	2,34,885	1,77,840	1,73,859
II	Education	5,605	7,850	12,417	25,872	8,624	8,908	12,587	12,084	12,446	13,470
III	Sanitation, Medical Services, and Public and Charitable Institutions.	9,440	10,648	20,268	40,356	13,452	24,199	38,935	51,700	44,085	44,007
IV	Miscellaneous ...	26,394	2,082	2,051	30,527	10,176	2,479	2,550	4,832	1,653	26,192
	Miscellaneous Debt Account.	170	234	762	1,166	389	110	46,875	50	2,570	374
	Total ...	2,09,410	1,90,726	1,82,226	5,82,362	1,94,121	2,02,287	3,81,874	3,03,551	2,39,194	2,57,902
	Balance ...	—28,919	—26,363	53,231	— 2,051	— 684	1,00,552	98,068	—71,105	—67,661	—39,807
	Total ...	1,80,491	1,64,363	2,35,457	5,80,311	1,93,437	3,02,839	4,79,942	2,32,446	1,71,533	2,18,095

Vellore Circle, North Arcot District, from the beginning up to 1878-79.

	Expenditure.	1871-72.	1872-73.	1873-74.	Total.	Average	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.
I	Public Works—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
	New Works ...	8,759	2,000	26,494	37,253	12,418	20,927	16,425	12,877	11,916	14,544
	Repairs	26,846	41,001	40,299	1,08,146	36,049	42,483	49,194	38,665	30,558	41,172
	Establishment ...	9,170	13,464	21,118	43,782	14,594	16,965	15,646	11,803	6,324	15,756
	Tools and Plant ...	345	623	824	1,792	597	59	405	...	3,134	1,576
	Refund of Receipts.	...	...	...	...	...	2	...	...	...	1
	Contribution to Chittoor Board for Palar Bridge.	...	...	...	...	...	...	5,000	20,000	...	...
	Total ...	45,120	57,118	88,735	1,90,973	63,658	80,436	86,736	83,405	60,932	73,049
II	Education	5,334	6,903	8,553	20,790	6,930	8,608	9,207	9,772	10,550	9,986
III	Sanitation, Medical Services, and Public and Charitable Institutions.	7,488	11,126	8,635	27,249	9,083	6,225	13,808	16,708	10,117	9,683
IV	Miscellaneous ...	11,829	769	3,809	16,407	5,469	1,127	989	1,148	1,525	1,311
	Miscellaneous Debt Account.	38	30	1,400	1,468	489	...	50	20	...	...
	Total ...	69,809	75,946	1,11,132	2,56,887	85,629	96,396	1,10,850	1,11,065	82,624	94,029
	Balance ...	16,317	48,292	23,633	88,242	29,414	27,941	28,656	—11,922	4,247	72,841
	Total ...	86,126	1,24,238	1,34,765	3,45,129	1,15,043	1,24,337	1,39,506	99,761	86,871	1,66,870

Hitherto the Officers of the Public Works Department have afforded their professional aid in executing Local Fund works, 25 per cent. of the amount expended by them being charged by Government for their supervision. In 1880 this arrangement will come to a close, and a special engineering establishment will be entertained by the circles. It is proposed to have an Executive Engineer in charge of the Chittoor Circle and an Assistant Engineer, under the general supervision of the Executive Engineer, in that of Vellore. A considerable economy is anticipated to be the result.

The various objects on which Local Funds are expended are the following:—

Communications.—Probably no district in the Presidency is so well provided with roads as that of North Arcot, especially in that part of the district which forms the Chittoor Circle. The total mileage distributed between the circles and divisions is—

Chittoor Circle.

Chittoor Taluk	about	168	miles.
Chandragiri do.	do.	99	,,
Palmanér do.	do.	58	,,
Wálájá do.	do.	172	,,
Gudiyátam do.	do.	75	,,
Kálahastri Zemindari	do.	71	,,
Kárvétnagar do.	do.	117	,,
Punganúr do.	do.	96	,,
Kangundi do.	do.	12	,,
		868	

Vellore Circle.

Vellore Taluk	about	126	miles.
Arcot do.	do.	71	,,
Wandiwash Taluk	do.	66	,,
Pólúr do.	do.	73	,,
Arni Jaghire	do.	57	,,
	Total ..	393	
	Grand Total ..	1,261	miles.

Communications were, however, not always so numerous or so well maintained as they now are. In 1871 the Collector reported them to be in "the very worst possible condition," and complained that he had no means of keeping them in repair. He had at first forced villagers to maintain them within their village limits, but upon the establishment of the Civil Courts an appeal had been made to the Judge, and it was

ruled that the Collector had no authority to demand free labour. The only roads then in existence were the following :—

1. Madras to Mysore *viâ* Naikenéri.
2. Madras to Ceded Districts *viâ* Karkambádi.
3. Madras to Nellore *viâ* Kálahastri.
4. Tirupati to Muglee Ghaut.

Besides these cart tracks of course existed, but were totally neglected. One of the best of them was the old road made by the pioneers through Tirutani and the Wálájá Taluk to the Vellore trunk road; it is still used and styled by the natives the "Payni báta." During the famine an attempt was made to convert it into a regular road.

During the village lease period renters engaged to execute the necessary repairs to all communications within their villages, but the obligation was neglected, and could not easily be enforced. It was then proposed to employ convict labour, but this was obviously impossible, except in the vicinity of jails, so in 1813 an Engineer Officer was deputed, with a party of pioneers, to put the district roads in order, and after several years a special department was organised under a Superintendent of Roads. Very little, however, seems to have been spent; for, when a return was called for in 1837, the statement from 1818 up to that date exhibts blanks except for two years against which the items were—

	Spent on Bridges.			On Roads		
	Rs.	A.	P.	Rs.	A.	P.
1832	281	5	0	2,446	11	6
1833	567	1	0	8,463	2	0

but this probably shows the expenditure by the Collector alone.

Numerous complaints were received regarding the villainous character of the North Arcot roads. One written in 1838 by the Agent of the Postal Department may be given as an example. He writes, "From Arcot to Trivellam, five miles, is hard and stony, endangering both horse and rider if he attempts to go beyond a walk or gentle canter. In parts large open drains cross the road at very short intervals. These, I perceive, tend greatly to our detriment, as well as to that of the horses, for most of our cattle get sprained in the drains. The road to Ambore, through palmyra topes, intersected by channels to let water into the fields, is a complete swamp after a few days. To Papankuppam the road is almost impassable after a shower, and during dark nights hardly to be traced." And this it must be remembered referred to the great trunk road to Bangalore, more frequented than any others in the district, and presumably kept in better repair than the rest.

As late as January 5th, 1855, the Civil Engineer, Fourth Division, wrote as follows :—"The trunk roads traversing the district are three—one going from Madras south through Chingleput to Trichinopoly; a second from Madras west through Ranipett, Vellore, and Vaniembady to Bangalore; and the third from Madras north from Soloorpett to

Nellore. From the second there branches off a road from Ranipett to Bangalore by Chittoor, and at Chittoor another trunk road branches to Cuddapah by Damalcheruvu. These roads are kept regularly in repair. Lately a road has been constructed from Vellore falling into the Ranipett and Chittoor road at Punnatore, thus connecting Vellore and Chittoor. With these exceptions the district may be said to have no communications. The tracks along which traffic labours in the dry weather have hitherto, without exception, been next to, if not quite, impassable in the rains."

In 1858 was first collected a road-cess of two per cent. upon the assessment of land in ryotwary taluks, which was expended in making these tracks good fair-weather roads, and, finally, passable in wet weather without much trouble. The passing of the Local Funds Act has produced funds which have rendered the communications of North Arcot second to those of no other district. The cess has been raised from six pies to nine pies, and finally to an anna in the rupee of the assessment of all lands in ryotwary and zemindari villages.

Until 1862 there was hardly a road-side avenue in the district. The remains of old avenues exist along parts of the road through Vellore to Mysore and that from Ránipett to Chittoor, but elsewhere avenues appear to have been absent. In 1862 Mr. Robinson began planting them extensively by the side of all the chief roads, expending one-sixth of the road fund upon this object, and, by 1871, 505 miles had been supplied with 168 young trees per mile at a cost of nearly a lakh of rupees. Besides this upwards of Rupees 30,000 had been spent upon way-side topes having wells. Owing to the rocky nature of the soil many of the trees have not made good progress, nor have they in some cases been well selected. Many, however, have flourished well, and most of the avenues are in a promising condition. As much cannot be said for most of the road-side topes.

Miscellaneous Public Improvements.—A considerable sum is annually spent under this head in clearing the neighbourhood of large towns, removing silt from existing bathing or drinking water tanks, excavating fresh tanks of this character, and like objects. During the late famine works of this nature were carried out to a very large extent, and at present little is left to be done in this direction.

Education.—The attention of Government seems first to have been directed to the subject of Education about the year 1825, when a report was submitted by the Collector showing that the district contained 630 schools and 69 colleges; by the former term were probably meant pyal schools, and by the latter institutions in towns in which Sanskrit was taught. The total number of scholars was given as—

	Boys.	Girls.
Brahmans	1,116	1
Vysias	630	None.
Sudras	4,856	32

	Boys.	Girls.
Mahommedans	538	8
Others	552	11
Total ..	7,692	52

It may, however, be well doubted whether this was a complete return.

In 1826 an Educational Committee was appointed to arrange for the establishment of Government Schools, and a few were opened. Their success proved small, and for many years the pyal schools were the more popular. Now, however, these have fallen far to the rear, and are generally regarded by the better classes merely as a means of imparting that elementary instruction which enables boys to enter schools of a higher standard under the Educational Department. Of the existing Government schools the first opened was the Zilla School of Chittoor which was established in 1856, and in the following year the Anglo-Vernacular School at Wálájápet and the Taluk School of Palmanér were set on foot, followed gradually by other similar educational establishments in Tirupati, Arni, Arcot, and other kusba towns. In 1861 the Grant-in-aid Rules and the Salary System were first brought into force, and in the following year the Village School system was introduced, being replaced in 1868 by the Result Grant system. When the Local Boards were constituted the management of elementary education was handed over to them. Such of the pyal schools as received aid under the Result Grant system are under the inspection of a staff of inspecting schoolmasters, whose ranges spread over two or three taluks.

In 1872 a careful inquiry was instituted into the actual state of primary instruction in the district. The result is thus described in the Proceedings of the Board of Revenue, dated August 3rd, 1873 :—

"There are in the district of North Arcot 1,412 village (pyal) schools, scattered very irregularly over 5,447 villages, or about one school to every four villages; but, as there are generally several such schools in the populous towns, the real condition of primary education amongst the rural population is not truly represented by these miserable averages. In the principal division, where the country is more backward, and there are numerous zemindaris, the ratio is one school to 5·2 villages, and falls as low in Kálahastri as 28 schools to 376 villages, and in Palmanér as 32 schools to 564 villages. In the southern taluks education is more attended to, and there is one school to every 2·2 villages.

"The schools are pretty equally divided between schools of private speculators and village subscription schools, thirty-nine only being supported by societies or wealthy persons—zemindars and the like. Only 135 schools are held in places set apart for such purposes, and by far the greater number (1,245) are entirely rudimentary schools in which the tuition and remuneration are very low. In 169 geography and arithmetic are taught. The school

fees vary from a rupee to an anna per mensem, and in more than a moiety of the whole number the fees are paid in kind. The remuneration of masters varies from four rupees to a few annas per mensem.

"It appears that under 20,000 children attend school in North Arcot, or one in ten of a school-going population of more or less than 200,000 boys (girls are not taken into account)."

These remarks, having been recorded only six years ago, may be taken as fairly applicable to the present time.

The following memorandum has been contributed by Dr. John Bradshaw, Inspector of Schools of the Fourth Division, of which North Arcot forms a part :- -

"Educational Institutions are now classified according to their standards as Colleges, High Schools, Middle-class Schools, and Lower-class Schools.

"Colleges are of two kinds—those that are fully developed and have classes for the B.A. degree of the Madras University (a four years' course after Matriculation), and second-grade colleges which have classes for the First Examination in Arts.

"There is no College in North Arcot, its proximity to Madras rendering an institution of the kind unnecessary.

"The High Schools prepare candidates for the Matriculation examination. All of them have also a middle, and most a lower department, under the same head master. The only High School in North Arcot is the Government High School in Chittoor, hitherto known as the Zilla School. It was established in 1856, and as yet has no proper building, being held in what was formerly a private dwelling house; but at the Proclamation Durbar on January 1st, 1877, several nobles and zemindars of the district subscribed a sum of Rupees 10,000 to go towards the erection of a school-house; a site has been selected and plans prepared, so that it may be hoped that before long this important school will have a building of its own. The staff consists of thirteen teachers; the Head master is a graduate, and all the others, except the masters in the Mahommedan Department and the Telugu munshi, are under-graduates of the Madras University. The school has all along taken a good position among those of its class as regards the number that annually matriculate from it. There are three vernaculars taught—Telugu, Tamil, and Hindustani. The lower school is mainly made up of the Mahommedan Department.

"The Church of Scotland School of Vellore is still only of the Middle Class, but the Mission have recently appointed a European graduate as head master, and intend that it should be of the Matriculation standard; there should be no lack of material as the town of Vellore contains a population of 50,000, and in the southern part of the district there are several good middle-class schools.

"In addition to the middle departments of the above schools, there are eleven Middle schools in the district—seven Government and three aided—all for native boys, and one aided school under the Chaplain of Vellore for East Indian boys and girls. The following table gives particulars as to the strength and standard of these schools :—

Middle Schools.	Stations.	On the Rolls.							
		31st March 1878.	31st March 1879.			31st March 1880.			Highest Class.
			Middle.	Lower.	Total.	Middle.	Lower.	Total.	
Government.									
1st Grade	Walajapet ...	133	63	76	139	63	78	141	Upper IV.
Do. do.	Arni ...	84	53	55	108	42	60	102	
2nd Grade	Arcot ...	50	26	57	83	32	53	85	Lower IV.
3rd do.	Tirupati ...	61	18	43	61	18	40	48	
Do. do.	Palmaner ...	61	6	43	49	9	33	42	Third.
Do. do.	Karvetnagar ...		12	32	44	14	36	50	
Mahommedan School.	Vellore	61	24	50	74	14	41	55	Lower IV.
Aided.									
Church School [1] ...	Vellore	33	9	11	20	9	23	32	Third.
3rd Grade do. ...	Ranipet	55	12	20	32	13	42	55	
Do. do. ...	Gudiyatam ...	62	26	54	80	14	50	64	
Church of Scotland Mission Schools.	Arkonam ...	126	22	116	138	45	104	149	Upper IV.
	Vellore ...	...	...	...	...	...	...	...	
	Total ...	726	271	557	828	273	560	833	

"For several years there has been at Vellore a Normal school for training young men to be schoolmasters. During 1878 it was put under a different footing, the establishment and standard being lowered, the preparation for the fourth grade and training of matriculated students being given up, and only the subjects for the fifth grade taught, the students now being, as far as possible, only men who intend being employed in Local Fund Board or Result Schools. The results of the last two years' work for 1878 and 1879 may be seen from the following table:—

Year.	Number of Students on Rolls.	Number presented for Fifth Grade.	Number passed			No. of Teachers under training.	Number appointed for first time.
			Class I.	Class II.	Total.		
1878	24	24	11	6	17	12	5
1879	44	42	16	15	31	20	11

"The Local Fund Board teachers on completing their course, and after appearing for the Fifth Grade Examination, return to their former schools, or in some cases to better-paid masterships, and nearly all the others get immediate employment in posts from Rupees 7 to Rupees 10 per month. The Vellore Local Fund Board recently sanctioned the appointment of a training master on Rupees 30 to be attached to the Normal school and prepare candidates for the Fifth Grade Examination. Masters are sent in by the Deputy

[1] For East Indian boys and girls.

Inspector from Local Fund Board schools, each of whom receives a stipend of Rupees 4 out of the salary he would have as master, and the balance and result grant go to his *locum tenens*. This arrangement has been in operation since February 1879, and sixteen village teachers were under training, of whom 12 passed out last December with certificates.

"For Mahommedans two schools were established a few years ago—one at Vellore and one at Arcot. The Mahommedan school at Vellore, established in 1873 as an elementary school, has met with marked success, not only as regards numbers, but in attaining to the standard of a second-grade school; and at the Fifth-grade examination of 1878 five pupils, or ex-pupils, appeared for examination, and all were successful. As employment was at once found for each of these, a stimulus to work and qualify by passing examinations has been given to the young Mahommedans in Vellore, and a large number are now studying.

"The school at Arcot has not been so successful; the inhabitants are poor and apathetic as regards education, satisfied with enough reading and writing for business transactions. The school contains but twenty boys and is of the lower standard.

"The number of girls in schools under inspection was on March 31st, 1879—

Chittoor Circle	368	714
Vellore ,, ...	346	

"This is a considerable advance on the numbers in 1876, when there were 572. There are two Government girls' schools—one at Vellore and one at Wálajápet. The American Mission has girls' schools in Chittoor and Vellore, both for Christian girls and for caste children.

"Distributing all the schools in North Arcot according to their standards, the following table shows the number of pupils in schools under inspection on March 31st, 1879:—

Number of Pupils studying in	Chittoor Circle.	Vellore Circle.	Total.
High schools [1] ..	294	215	509
Middle schools [1] ..	522	264	786
Municipal schools ..	183	235	418
Local Fund schools ..	1,163	1,498	2,661
Result schools ..	4,122	2,900	7,022
Other Lower-class schools.	27	84	111
Total ..	6,311	5,196	11,507

"The following table shows the races to which the several pupils belonged on 31st March 1880:—

[1] Including all departments.

—	Chittoor Circle.	Vellore Circle.	Total.
Europeans	..	2	2
East Indians	10	65	75
Hindus	6,462	4,862	11,324
Mahommedans ..	190	364	554
Native Christians ..	61	89	150
Pariahs	14	23	37

" The Languages studied (March 1880) are as follows:—

—	Chittoor Circle.	Vellore Circle.
English	1,014	607
Telugu	5,081	524
Tamil	1,643	5,107
Hindustani	33	75

" The Agencies by which the various schools are maintained (March 1880) are exhibited below:—

Maintained by	Departments in Schools.	Chittoor Circle.		Vellore Circle.	
		Boys.	Girls.	Boys.	Girls.
Government, Local Fund Boards, and Municipalities.	Higher	52	..	..	..
	Middle	269	..	85	..
	Lower	1,589	54	2,160	76
Missions	Higher	..	..	..	..
	Middle	45	..	75	13
	Lower	124	..	223	174
Native Managers	Higher	..	..	..	..
	Middle	26	..	..	..
	Lower	4,426	72	2,563	36
	Total ..	6,531	126	5,106	299

HOSPITALS.

There are at present six public dispensaries in the district situated at Chittoor, Vellore, Ránipett, Tirupati, Palmanér, and Wálajápet, and it is proposed shortly to open another at Arni. The first of the existing dispensaries to be opened was that at Chittoor, established in 1849 from

subscriptions raised by the Civil Surgeon, Government consenting to supply medical stores. In 1863 the present building was constructed within the old fort. It is a well-built and commodious building capable of accommodating thirty in-patients. The number of patients treated and the cost of the institution appear below :—

——	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.
Out-patients (new admissions)...	5,534	5,440	4,784	3,710	6,211	10,045	8,761	8,884
In-patients (new admissions) ...	228	186	210	148	120	167	227	314
Average daily attendance ...	61	55	54	54	53	68	71	66
Number of surgical operations	...	21	Not recorded.					
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cost of establishment	1,860	1,860	1,579	904	1,512	904	1,122	1,212
Cost of medicine, &c.	49	390	...	217	...	...	450	511
Cost of diet	613	500	720	505	442	390	583	540
Miscellaneous and other charges.	418	349	830	320	228	525	132	146
Received from Government ...	2,506	497	420	420	1,104	504	591	1,315
Received from Local and Municipal Funds.	321	...	...	...	...	1,304	133	65
Received subscriptions and other sources.	28	3,759	1,942	1,239	1,221	868	717	1,195

——	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.
Out-patients (new admissions).	9,131	7,196	7,247	7,783	8,490	9,969	8,202	7,982	10,357
In-patients (new admissions).	233	225	277	345	379	319	292	618	2,127
Average daily attendance.	54	34	49	59	66	77	63	64	47
Number of surgical operations.	Not recorded.								39
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cost of establishment.	1,194	804	1,176	11,132	2,837	12,649	6,373	6,488	1,629
Cost of medicine, &c. ...	...	804	626	134	...	1,092	1,247	1,761	3,520
Cost of diet	379	602	771	1,129	207	1,517	1,048	1,595	1,727
Miscellaneous and other charges.	152		288	138	57	26	86	658	1,954
Received from Government.	250	1,887	1,983	9,908	2,477	11,209	4,976	4,687	...
Received from Local and Municipal Funds.	...	...	241	2,308	182	4,174	3,745	5,955	7,791
Received subscriptions and other sources.	980	1,137	637	756	475	697	693	...	...

In 1854 was opened the dispensary at Vellore, and in the following year that of Ránipett, both from the savings of the Vellore and Arcot Langerkhana funds. These endowments were for Vellore Rupees 7,330 and for Arcot Rupees 2,310 a year. The accumulated savings of several years were considered sufficient to maintain a dispensary at Vellore at an annual cost of Rupees 2,460 and another at Arcot at Rupees 2,316 per annum, but the price of grain rose in subsequent years, the savings disappeared, and the Langerkhana expenditure itself exceeded the assets by Rupees 1,200 in 1860. Government therefore proposed to close both dispensaries, but the Secretary of State objected and directed that they should be maintained at reduced rates, viz., Rupees 2,200 for Vellore and Rupees 2,065 for Ránipett, the number of persons admitted to the Langerkhanas being also reduced so as to entail an expenditure not exceeding Rupees 4,176 in Vellore and Rupees 1,200 in Arcot.

The Vellore dispensary is now under the management of the Munici-

pality which receives a contribution towards its expenses from Local Funds. The old European barracks are at present occupied, but they are ill-suited for the requirements of so large a town as Vellore, for though the accommodation is considerable the wards are low and poorly ventilated. The statistics relating to a series of years are appended :—

—	1863.	1864.	1865.	1866.	1867.	1868.	1869.
	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions).	6,038	5,473	5,053	5,112	5,024	5,925	5,093
In-patients (new admissions).	245	114	107	226	236	174	210
Average daily attendance.	69·25	54·25	41	31·5	29·5	22·6	26·18
Number of surgical operations.	9	7	...	...	...	...	3
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cost of establishment.	222	276	279	312	360	360	380
Cost of medicine, &c.	103	75	157	349	207	272	1,065
Cost of diet ...	579	183	249	635	894	845	1,065
Miscellaneous and other charges.	323	274	319	735	715	1,104	998
Received from Government.	2,081	1,790	1,451	3,180	2,522	2,265	2,200
Received from Local and Municipal Funds.	...	...	...	...	...	...	250
Received subscriptions and other sources.	148	60	1,992	651	353	457	687

—	1870.	1871.	1872.	1873.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions).	4,672	6,863	4,994	4,841	6,889	6,498	6,905	6,756	10,004
In-patients (new admissions).	221	282	434	496	776	634	710	2,989	1,014
Average daily attendance.	22·33	46·12	33·05	33·15	46·21	39·58	29·18	31·31	51·70
Number of surgical operations.	...	10	7	15	7	...	6	11	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cost of establishment.	303	288	863	488	671	853	804	1,388	1,585
Cost of medicine, &c.	231	19	...	780	381	477	796	400	86
Cost of diet ...	1,109	563	1,391	939	1,340	2,067	1,820	2,409	110
Miscellaneous and other charges.	709	474	975	849	143	329	606	446	287
Received from Government.	2,4·1	2,200	2,016	...	2,200	2,200	2,200	2,200	2,200
Received from Local and Municipal Funds.	600	200	1,500	750	750	887	887	750	750
Received subscriptions and other sources.	465	297	296	193	115	58	6c1	50	50

The Ránipett dispensary is managed by the American Medical Missionary resident at that station whose services are rendered gratuitously, but all the other expenses of the institution are borne by the Chittoor Local Fund Board. The hospital is surprisingly popular as will appear from the following figures :—

—	1866.	1867.	1868.	1869.	1870.	1871.	1872.
	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions).	2,887	3,170	4,953	5,332	6,366	6,900	4,966
In-patients (new admissions).	138	276	400	715	758	770	204
Average daily attendance.	...	42	91	96	99	98	73
Number of surgical operations.	...	265	402	534	580	558	368
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Cost of establishment ...	648	768	810	864	942	942	942
Cost of medicines, &c. ...	949	1,550	1,072	1,438	1,102	1,270	923
Cost of diet	1,175	2,150	2,480	2,683	2,533	2,005	1,530
Miscellaneous and other charges.	875	1,508	1,210	1,181	983	1,020	845
Received from Government.	435	2,751	2,100	2,128	2,059	2,045	3,565
Received from Local and Municipal Funds.	...	...	...	...	...	...	...
Paid by American Arcot Mission.	3,212	3,225	3,982	4,038	3,502	3,792	675

—	1873.	1874.	1875.	1876.	1877.	1878.	1879.
	NO.	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions).	6,983	5,988	8,223	7,056	7,773	8,289	11,334
In-patients (new admissions).	209	318	450	501	1,065	1,346	667
Average daily attendance.	97	87	93	82	86	87	101
Number of surgical operations.	437	436	476	377	282	197	308
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Cost of establishment ...	942	1,610	1,010	1,619	1,435	2,110	1,372
Cost of medicines, &c. ...	803	798	1,387	1,015	774	2,512	*1,297
Cost of diet	1,323	1,179	1,469	1,180	3,195	2,284	1,242
Miscellaneous and other charges.	517	428	1,794	839	1,472	11,814	1,425
Received from Government.	...	...	...	...	...	2,630	...
Received from Local and Municipal Funds.	2,815	2,815	5,650	5,253	6,877	5,450	5,337
Paid by American Arcot Mission.	770	1,200	461	458	435	355	360

The salary of the Surgeon in charge is not included in the above. The building used is one of the old European barracks, a lofty building comprising two large wards, one for males and the other for females. Within a short distance stands the lying-in hospital opened in 1876 since which year the number of cases treated have been 85, 206, 215, and 223 in that and succeeding years respectively.

The Tirupati Dévasthánam Dispensary is wholly supported by the Mahunt of the Tirupati Temple It was first opened in 1871 in a rented house and was subsequently removed to a mantappam, but only out-patients were treated. In 1876 a special building upon the model of that at Chittoor, though rather smaller, was completed at the cost of the Mahunt and in-patients were admitted. The accommodation provided is for 18 males and 12 females. The figures relating to each year are—

—	1871.	1872.	1875-76.	1876-77.	1877-78.	1878-79.
	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions).	4,771	5,090	4,502	4,155	4,893	7,795
In-patients (new admissions).	...	...	...	195	619	419
Average daily attendance.	37	48	30	48	74	107
Number of surgical operations.	No records kept.			183	174	229
	RS.	RS.	RS.	RS.	RS.	RS.
Cost of establishment ...	876	987	950	988	1,228	1,236
Cost of medicines, &c. ...	...	605	582	443	683	1,105
Cost of diet	2	10	...	224	1,556	829
Miscellaneous and other charges.	259	105	6,536	4,225	1,159	554
Subscriptions and other sources.	4,960	5,625	8,760	7,012	4,931	3,074

The Palmanér dispensary was opened in the beginning of 1873 in a rented private residence; it is hoped shortly that a special building will be constructed. During the first year the Rev. J. Chamberlain, M.D., of the American Mission, was in charge, but upon his departure from India in 1875 a First-class Apothecary was appointed who still holds the appointment. In popularity and success the hospital probably ranks next to that at Ránipett, but, situated as it is in a sparsely populated country, the numbers treated would appear to be small. The figures are—

—	1873.	1874.	1875.	1876.	1877.	1878.
	NO.	NO.	NO.	NO.	NO.	NO.
Out-patients (new admissions)..	4,506	5,807	5,018	4,103	6,031	6,189
In-patients (do.)..	161	306	361	334	584	477
Average daily attendance ..	46	58	51	43	74	85
Number of surgical operations .	..	27	18	8	136	145
	RS.	RS.	RS.	RS.	RS.	RS.
Cost of establishment ..	1,313	2,267	2,308	2,458	2,493	2,451
Do. of medicines, &c. ..	1,600	764	880	918	796	721
Do. of diet	371	776	806	1,081	2,450	1,686
Miscellaneous and other charges.	757	465	2,278	929	705	928
Received from Government ..	..	..	..	..	..	..
Do. from Local and Municipal Funds.	..	4,270	6,274	5,375	6,446	5,153
Subscriptions and other sources.	..	4	..	12	..	634

The Wálajápet dispensary was only opened in 1879. The building, which is a handsome one, was built by Dr. H. M. Scudder without aid from the Local Fund Board or Municipality, but a contribution to meet working expenses is now made by both. No accommodation for in-patients has yet been constructed. The number of out-patients treated in 1879 was 7,017 at an expenditure of Rupees 1,418. The average daily attendance was 58, and 66 surgical operations were performed.

Vaccination.—As early as 1803, Government impressed upon the Collector of the district the necessity of persuading the people to seek safety from the attacks of small-pox through inoculation. The work was entrusted to the European medical officers of the district, and such

native practitioners as they should certify to be competent, the remuneration granted being S.P. 10, or Rupees 35, for each hundred cases that were successful. To what extent these operations were carried on does not appear from the district records, but, after vaccination became the practice, periodical returns of cases were submitted from which those of two years have been selected at random :—

Years.	Europeans and East Indians.	Hindus.	Mahommedans.	Successful.	Unsuccessful.
1854-55	682	9,550	1,460	11,484	308
1855-56	471	9,905	1,245	11,186	435

That these figures were correct it is difficult to believe. Even now, with more efficient supervision, vaccinators are found to submit fictitious results, and a quarter of a century ago this must have been much more the case.

[1] "The Department of Vaccination was organised in 1865, under the control of the Superintendent-General of Vaccination. The staff in the North Arcot District before 1865 consisted of a Deputy Superintendent of the Apothecary class and fourteen vaccinators. A few of the latter were Hospital Assistants, and the rest were vaccinators on Rupees 18 each per mensem. The vaccinators, prior to the new organization, were nominally under the orders of the Zillah Surgeon. A large number of the old vaccinators had to be dismissed to reduce the number to the new scale. Every two districts were constituted one circle, as the establishment under the new scale was small. One Superintendent, eleven vaccinators, and two peons were appointed to this district. The staff was required to itinerate in a group, and worked under the personal supervision of the Superintendent, who commenced work at one end of the circle and passed through to the other, so that every village or hamlet was visited. In the hot weather the vaccinators were located in the large towns, in order to maintain a supply of good working lymph during the recess. Six punctures were insisted on instead of the ordinary two, which had hitherto been the practice. The punctures were ordered to be regular and equi-distant, three in a longitudinal line on each arm of males, and in the case of females a triangle was formed by the punctures, so that not only could the sex of subjects vaccinated be known by the inspection of the arm, but also, from the regularity of the punctures, the cicatrices of vaccination could easily be distinguished from any other wound, ulcer, or scar. Lancets were abolished and common sewing needles substituted. The needles are not only cheap and economical, but are far more successful and effective than the lancet as a vaccinating instrument. In 1866 the staff were discontinued owing to the fatiguing nature of their duties, and the absence of any pension. Several

[1] Kindly furnished by Dr. J A Laing, Inspector of Vaccination.

treatises on vaccination were published and distributed gratuitously during this year. The Municipalities and Zemindars were encouraged to employ vaccinators and increase the number. In 1868 the department was reorganised, by orders of the Government of India; the Apothecary Superintendent was removed and another on Rupees 70 a month was appointed. Two classes were made among vaccinators, viz., first class on Rupees 18, and second class on Rupees 10. Eleven vaccinators were entertained, of whom four were first class, and seven second class. In 1869, owing to constant desertions and resignations among vaccinators, an agreement was made with them to serve for three years. If such was not done they forfeited half salary for the time they served. The vaccinators, who were working in a body, were distributed over the district, one or two being appointed to each taluk. Village lists of work performed by vaccinators were ordered to be given to the headmen of villages. Vaccinators who were found to have falsified returns were prosecuted and punished. In 1875 the district was divided into two vaccine circles, and a separate Superintendent was appointed to each. Down to the beginning of 1875, the Department of Vaccination, which was a branch of the Medical Department, was transferred to the Sanitary Department, and the designation of Superintendent was changed to Deputy Inspector. Vaccinators are now servants of the Local Fund Boards, and the Deputy Inspectors are subordinates to the Inspector of Vaccination and Deputy Sanitary Commissioner.

"The figures given below will show how vaccination has increased:—

Year.	Persons vaccinated.	Quinquennial Average.
1865	7,722	
1866	14,736	
1867	30,162	15,176
1868	8,392	
1869	14,869	
1870-71	7,801	
1871-72	6,777	
1872-73	8,398	9,685
1873-74	13,408	
1874-75	12,043	
1875-76	14,245	
1876-77	21,665	Three years' average. 32,139
1877-78	60,508	

"The large increase shown in the year 1877-78 was entirely due to the great prevalence of famine, as all people admitted into relief camps, who were unprotected, were vaccinated."

Sanitation.—At most of the taluk cusbah stations, as well as at Ránipett, Arkónam, and Tirupati a small sanitary establishment is maintained consisting of carts and scavengers to carry away dust, ashes, &c., deposited by the residents in stone bins, placed at intervals in all the principal streets. During the occurrence of large festivals, such as those at Tirupati, Kálahastri, Tiruvettúr, Virinjipuram, &c., temporary arrangements are made in the way of latrines and a scavenging establishment. A Hospital Assistant is deputed to be present at Tirupati and Kálahastri during the feasts.

Markets.—At present there is but one Local Fund market at Arkónam, and that was only opened a couple of years ago. As it has proved a most profitable undertaking, paying one hundred per cent. per annum upon the original outlay, markets will soon be opened in other large places. The construction of a very large one at Arcot is about to be undertaken.

Choultries.—Numbers of these are scattered all over the district, and being generally substantially built of stone, require little attention. Many are endowed, and their owners carry out the necessary repairs. The chief choultries under the Local Fund Boards are those of Arkónam and Sholinghur. The former being at a large railway junction is much frequented, and the latter, which is described with the town of Sholinghur, has an endowment transferred to the Local Fund Board. It is intended solely for Brahmans.

Travellers' Bungalows.—Before the line of railway was opened dawk bungalows were kept up along all the trunk roads, at intervals of about ten miles. When the railway was opened the number of European travellers became so few that all were given up except two—one at Chittoor and the other at Palmanér. Afterwards one at Venkatagirikóta was opened, but has no furniture. The bungalow at Palmanér is almost as bad, and that at Chittoor not very well supplied. Many of the old bungalows were sold and dismantled by their purchasers, but a few were retained, one half being used as a police station, and the other, without furniture, being available for district officers on circuit. This is the case at Nagari, Puttúr, Naikenéri, Naraharipett, Poiny, Venkatagiri, Gudiyátam, Ambúr, Arni, Tiruvettúr, and Wandiwash. At Kávéripák, Pálár Anicut, Tirupati, Chandragiri, Dámalcheruvu, Púthalpat, Pallikonda, Poiny Anicut, Kanniambádi, and a few other places, buildings, most of them nominally for tools, but also used by district officers, have been built and are maintained out of the allotments for roads. The Kávéripák bungalow, upon the bund of the large tank, enjoys a magnificent view over the extensive waters spread.

MUNICIPALITIES.

There are but two municipal towns in North Arcot, viz., Vellore and Wálájápet.

The largest of these by far is that of Vellore. As early as 1854 an attempt was made to constitute it a Municipality. In 1852 several residents applied for the application of the provisions of Act XXVI of 1850 to the town, and Government accordingly directed that a proclamation should be made calling upon all householders to vote for or against the measure. The result was that 3,795 votes were recorded in favour of, and only 135 against it, while 3,294 persons refrained from voting altogether. The Board of Revenue considered the proportion in favour of the Municipality too small, but the Government of India ordered the introduction of the Act. As soon as this resolve was carried into effect in January 1854, a violent opposition was raised; all shops were closed, and the feeling of disaffection was so great that the Collector reported that the attempt must be abandoned. Vellore accordingly ceased to be a Municipality until 1866, when the Towns' Improvement Act of the previous year was introduced and a Commission formed. In 1871 the new Act (III of 1871) took effect. Very much has been done during the past twelve years in making the town more sanitary. The area comprised within the municipal limits is nearly two square miles in extent, a large portion being densely covered with buildings. There are about twenty miles of road and street kept neatly gravelled and swept. Masonry drains have been constructed on either sides of the chief streets in the town, and this work is being extended Upwards of four hundred stone dust-bins have been set up, and are daily cleared by means of thirty conservancy carts. The other usual sanitary buildings have also been constructed, with the necessary establishment. There are three markets, one built by the Municipality, which brings in a good income annually, as does the slaughter-house. The supply of drinking-water is chiefly drawn from two large reservoirs called the Súriagunta (rainfed) and the Basavamithrankulam, though there are more than sixty public wells scattered over the town, twenty of which yield excellent water. The whole of the town, with the exception of the fort, is lit by kerosine lamps, of which there are 368 at present, and 16 oil lamps dimly illuminate the interior of the fort. The municipal hospital—particulars regarding which have been already given—is situated within the fort. The old endowment known as the Langarkhána Fund has been handed over to the Municipality, and is expended in giving raw rice daily to a large number of decrepit poor. The income and expenditure of the Municipality during the last six years is shown below:—

Years.	Receipts.											
	Rates on Houses.	Trade Tax.	Tolls.	Tax on Carriages or Vehicles and Animals.	Registration of Carts.	Licenses.	Fines.	State Contribution.	Arrears including Balance.	Miscellaneous.	Other Receipts and Advances recovered.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1873-74	4,663	5,768	18,150	2,110	1,092	336	85	1,133	12,972	18,708	88	65,105
1874-75	5,073	...	15,300	1,905	990	38	139	1,126	21,103	13,963	...	59,637
1875-76	5,742	...	19,400	2,221	1,713	327	719	1,132	11,218	13,802	...	55,674
1876-77	5,355	...	15,400	1,987	947	133	234	1,840	6,527	13,542	...	45,965
1877-78	4,976	3,665	8,587	1,834	827	231	266	1,158	4,729	11,526	...	37,799
1878-79	5,551	5,021	14,678	1,951	973	24	310	1,140	5,692	19,139	212	55,291
Average ...	5,227	2,509	15,253	2,001	990	181	292	1,255	10,374	15,113	50	53,245

Years.	Expenditure.							
	New Works.	Repairs.	Conservancy.	Police.	Establishment.	Miscellaneous.	Balance.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1873-74	9,441	5,813	5,098	...	14,637	13,535	16,581	65,105
1874-75	10,299	3,035	5,729	...	16,134	14,333	10,107	59,637
1875-76	2,991	2,754	4,708	...	15,431	19,554	10,256	55,674
1876-77	685	5,405	5,399	...	13,005	17,914	3,557	45,965
1877-78	527	4,286	3,431	...	15,148	12,882	1,525	37,799
1878-79	339	6,035	3,170	...	15,378	20,927	3,442	55,291
Average ...	4,047	4,551	4,589	...	14,956	17,524	7,578	53,245

Wálájápet was formed into a Municipality in the same year as Vellore (1866), and has been one of the most successful instances of the working of the Act. The area of the town is less than a square mile, but it is poor, and has for many years been decreasing in prosperity, yet in spite of a straitened income and some discontent on the part of the people, the Commissioners, who are all natives, have made their town probably the neatest in Southern India, and earned for it the title of "the gem of North Arcot." There are about 11 miles of road and street maintained by municipal funds, exclusive of the great trunk road which passes through Wálájápet, and for which Government makes a yearly contribution. The water-supply, which was very bad, has been greatly improved; several of the large tanks with which the town is provided having been cleaned and made fit for drinking purposes. Two markets, one for meat and the other for vegetables, have been built in the centre of the town, as well as a slaughter-house; more than 400 dust-bins have been constructed, cleared daily by means of five scavenging carts. The lighting of the town is poor, there being but 39 lamp posts fixed in the more frequented parts.

The following statement shows the income and expenditure during the last five years:—

Years.	Receipts.											
	Rate on Houses and Lands.	Trade Tax.	Tolls.	Tax on Carriages and Animals.	Registration of Carts.	Licenses.	Fines.	State Contribution.	Arrears including Balance.	Miscellaneous.	Other Receipts and Advances recovered.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1874-75 ...	1,721	...	5,330	351	623	35	61	293	1,551	906	345	11,219
1875-76 ...	1,655	...	4,320	348	627	53	114	269	2,270	679	285	10,624
1876-77 ...	1,632	...	2,906	360	604	146	180	253	247	858	250	7,420
1877-78 ...	1,155	1,672	3,651	268	590	136	101	255	167	892	225	9,107
1878-79 ...	1,647	1,700	2,903	337	660	120	92	43	1,154	1,104	1,903	11,703

Years.	Expenditure.							
	New Works.	Repairs.	Conservancy.	Police.	Establishment.	Miscellaneous.	Total.	Balance.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1874-75 ...	1,060	1,430	2,318	...	3,213	1,275	9,298	1,921
1875-76 ...	1,589	1,192	3,156	...	3,152	1,532	10,624	...
1876-77 ...	138	423	2,083	...	2,644	1,531	7,420	...
1877-78 ...	487	658	2,785	...	3,338	1,837	9,107	...
1878-79 ...	611	877	1,867	...	3,966	4,093	11,415	377

PUBLIC WORKS DEPARTMENT.

This department was instituted in 1857, previous to which year repairs to irrigation and other works used to be executed by what was termed the "Marammat Department" under the Collector. The establishment consisted of a maistry, on Rupees 21 or 14 in each taluk, and a head superintendent (Rupees 50), deputy superintendent (Rupees 28), with three clerks (Rupees 50) in the Collector's Office. Tahsildars, with the aid of their maistries, prepared estimates and submitted them to the Collector for sanction. Latterly estimates for all more important works were framed by the Civil Engineer, under whose supervision such works were also carried out, while Tahsildars superintended the execution of all the petty works.

When the Public Works Department was established in 1857, the staff in North Arcot consisted of a District Engineer and a few assistants. Six years later the district was divided into five ranges, viz., Wálájá,

Vellore, Pólúr, Chittoor, and Chandragiri, each being in charge of an Engineer Officer, or Upper Subordinate, assisted by Overseers. The office of District Engineer was then abolished, as the district was formed part of the Fourth Division under a Superintending Engineer. In 1872 a further change was introduced, a District Engineer being appointed to North Arcot, which was now formed into four ranges, viz., Wálájá, Vellore, Pólúr and Chittoor, each worked by an Engineer Officer, or Upper Subordinate, with Overseers as before. In 1878 an arrangement similar to that brought into operation in 1863 was made. The district was constituted part of the charge of the Superintending Engineer of the Third Circle, and was divided into two ranges, that of Vellore and that of Chittoor. The former was composed of the Wálájá, Vellore, and Pólúr ranges. By this arrangement the office of District Engineer again disappeared. In 1879 the two divisions were amalgamated, and are at present in charge of an Engineer Officer, stationed at Vellore, with an Assistant.

The following statement shows the staff of the department during the last ten years, and the cost of the establishment, as well as the expenditure upon roads, irrigation works, buildings and sundries in each year: —

Year.	Number of				Total Cost of Establishment (including Travelling Allowance and Contingencies).	Expenditure on			
	Gazetted Officers.	Overseers. Local Fund.	Overseers. Imperial.	Inferior Servants and Office Establishment.		Roads.	Irrigation.	Buildings.	Sundries.
					Rs.	Rs.	Rs.	Rs.	Rs.
1869-70 ..	5	14	12	128	76,970	96,225	91,664	1,16,393	609
1870-71 ..	3	13	12	118	64,897	1,93,433	1,24,130	84,145	738
1871-72 ..	3	14	12	119	60,312	1,62,668	70,978	65,052	2,317
1872-73 ..	2	14	12	119	65,225	1,63,057	1,36,419	25,613	5,596
1873-74 ..	4	14	14	138	82,082	1,72,010	1,60,518	80,931	6,069
1874-75 ..	4	14	12	135	86,233	1,85,603	1,81,426	69,730	7,548
1875-76 ..	7	14	12	146	1,01,197	2,48,594	3,39,773	58,261	14,277
1876-77 ..	4	14	12	135	89,436	2,19,766	1,68,623	45,790	21,544
1877-78 ..	4	14	10	136	92,850	69,447	1,97,317	68,437	12,101
1878-79 ..	4	14	13	132	1,11,463	9,021	15,903	20,409	4,243

The subject of roads has been treated of under Local Funds, since their repairs are paid for out of those funds. Irrigation works occupy most part of the attention of the department, but much has yet to be done before the bulk of the tanks and channels can be considered as being in fair order. During the Nawabs' Government they were greatly neglected, and in 1803, upon the urgent representations of the Collector, a good deal was done towards repairing the accumulated neglect of years, but even in 1812 it was reported that at least five and a quarter lakhs were still needed to put all irrigation works into fair order. During the village leases the duty of repairing tanks and channels was imposed upon the village lessees, but it was found that they did not comply with this

condition of their engagement. In 1813 an officer styled the Superintendent of Tank Repairs was appointed to North Arcot, with two or three of the neighbouring districts. He reported in 1814 that most of the tanks in the district were in a most dilapidated condition, having had but little expended upon them. The amounts which had been spent were given as—

Fasli.	Rs.	Fasli.	Rs.
1211	2,513	1217	43,715
1212	15,320	1218	28,564
1213	3,395	1219	31,510
1214	5,520	1220	40,652
1215 . ..	6,030	1221	30,762
1216	17,423	1222	6,888

The Superintendent of Tank Repairs submitted a very large number of estimates,[1] and a good deal seems to have been done by him and Revenue Officers in subsequent years, but the extensive range allotted to him prevented his undertaking very much work; and as the Revenue Department could not well superintend extensive repairs, their operations were confined to works which, without repair, would cause serious loss of revenue to Government. To obviate these inconveniences the appointment of an Assistant Surveyor to make estimates, measure up work and pay workmen, was in 1818 proposed by the Collector and sanctioned. The forming of contracts was still left to Tahsildars under the supervision of the Collector.

POST OFFICE.

Until 1872 there were two postal systems working in the district, viz. the Imperial and the District Posts.

The Imperial Post was under the management of the Postmaster-General. There were at first only three lines along which it travelled through the district, the northern *viâ* Karkambádi, the north-western *viâ* Chittoor, and the western along the great trunk road through Vellore; the southern taluks had no Imperial Offices. As late as 1838 there were only seven of these situated in the chief towns. Under circumstances such as these it was absolutely necessary that corre-

[1] The rates quoted in 1814 were—

	Rs.	A.	P.			
Earthwork	3	8	0	per	100	cubic yards.
Rough stone work	0	1	4	,,	100	cubic feet.
Brick in chunam	0	2	8	,,	100	do.
Bricks	1	8	0	,,	1,000	

spondence between the Collector, his divisional officers, and the taluk officials should be carried by a special agency. This was called the District Dawk, and, until 1834, was used for official correspondence alone; but the peons were known to carry letters for private persons as a favour or for a small remuneration, and it was at last resolved to throw the post open to the public, rendering the charge legal, but crediting it to Government. Postage, which varied according to distance to the nearest Imperial Office, and not according to weight, was charged; the rates it seems impossible now to ascertain.

On May 1st, 1872, the District Post, which had been under the management of the Assistant Collector, was handed over to the Imperial Department as a tentative measure. The result proved satisfactory, and the arrangement has been confirmed, a considerable economy being the result. There were twenty-two district offices at Chittoor, Palmanér, Gudiyátam, Arni, Vellore, Kuppam, Wálájápet, Arkónam, Nagari, Kátpádi, Pétambúr, Old Arcot, Máderpák, Tirupati, Venkatagirikóta, Pallikonda, Tiruvallam, Bramhadésam, Chétput, Narsingráyanipett, and Venkatagiri. At the first twelve of these, Imperial Offices also existed, so that the expense of a double establishment was entailed until just before the transfer, when eleven of the offices were closed, and that at Chittoor alone retained. After the transfer the District Offices were gradually converted into Imperial ones; some were abolished and several new offices were opened. The offices now existing are—

Head Offices.	Taluks.	Sub Offices.	Branch Offices.	Receiving Offices.
Arcot (Ránipett).	Wálájápet ..	Wálájápet		Arcot proper.
		Shólinghúr	Bánávaram.	
		Káveripák		
		Pannapák		
	Arcot ..	Bramhadésam		
		Kalavai		
		Mélvisháram		
		Timiri	Hasanamapett.	
		Tiruvettúr		
	Arni	Arni		
		Satiavijayanagaram ..		
	Wandiwash ..	Wandiwash ..	Désur	
			Thellár.	
	Pólúr ..	Pólúr	Kadaládi.	
		Chétpat	Kalambúr.	
Conjeeveram.	Arcot	....	Mámandúr.	
Arkonam.	Chandragiri ..	Chandragiri	Tiruchanúr.	
		Tirupati		
		Rénigunta.		
	Kálahastri ..	Kálahastri.		
	Máderpák ..	Máderpák.		
	Náráyanavanam.	Náráyanavanam.		
		Kárvetnagar.		
		Nagari		
		Puttúr.		
	Tirutani ..	Tirutani	Pallipat.	

Head Offices.	Taluks.	Sub Offices.	Branch Offices.	Receiving Offices.
Chittoor.	Chittoor ..	Narasingráyanipett ..	Puthalpat.	
		Venkatagiri.		
	Chandragiri ..	Dámalcheruvu.		
	Wálájápet ..	....	Ponné.	
	Palmanér ..	Palmanér	Baireddipalle.	
		Venkatagirikóta.		
	Punganúr ..	Punganúr.		
		Ambúr	Mélpatti.	
Vellore.	Vellore ..	Kanniambádi.		Saidápet.
		Pallikonda.		
		Virinjipuram.		
	Gudiyátam ..	Gudiyátam.		
		Kátpádi.		
		Sátghur.		
		Tiruvallam.		
	Arni ..	Kannamangalam.		
	Chittoor ..	....	Mélpádi.	
	Kangundi ..	Kuppam.		

giving a total of 4 head offices, 42 sub offices, 13 branch offices, and 2 receiving offices within the district.

Below is shown the number of letters, newspapers, parcels and books received and despatched in various years by the Imperial Post.

Year.	Letters		Newspapers		Parcels		Books		From Post Offices at
	Despatched.	Received.	Despatched.	Received.	Despatched.	Received.	Despatched.	Received.	
1861-62.	349,897	358,258	4,994	31,121	2,502	3,833	704	1,676	Vellore, Arcot, Chittoor, Palmanér, Arni and Karkambádi.
1865-66.	412,669	390,276	6,288	22,762	2,032	2,808	678	2,106	Vellore, Arcot, Chittoor, Palmanér, Arni, Karkambádi, Arkónam, Kátpádi, Tirutani, Wálájápet, Kálahastri, Ambúr, Tiruvallam, Gudiyátam, and Tirupati.
1870-71.	652,197	616,275	7,336	28,973	1,608	1,807	3,457	6,805	Vellore, Arcot, Chittoor, Palmanér, Arni, Arkónam, Kátpádi, Wálájápet, Kálahastri, Ambúr, Gudiyátam, Rénigunta, Názáyanavanam, Sholinghur, Sátghur, and Kuppam.

During late years half-yearly enumerations have been held during the second weeks of February and August of each year, and from the results an estimate has been formed of the number of articles received for delivery during the year.

Year.	Number of Articles received for delivery in Post Offices as per Enumeration Returns.		Total for two Weeks in the Year.	Estimated Total for the Year.
	During Week ending August 14.	During Week ending February 14.		
1875-76	22,694	23,800	46,494	1,208,844
1876-77	22,670	22,617	45,287	1,177,462
1877-78	22,513	23,043	45,556	1,184,456
1878-79	21,864	24,035	45,899	1,193,374

FORESTS.

Some account of the forests of the district has already been given in Chapter I; but further particulars and an account of the mode of working them may be here stated.

Until 1844 the only tax upon timber was that collected as land customs by the Sáyer officials. When land customs were abolished, felling greatly increased, and became so indiscriminate that in 1846 the Collector, Mr. Lovell, directed that all jungles should be taken charge of by Tahsildars and that no tree should be felled without their permission, which should only be given for such trees as the monigar of the village pronounced fit to be felled. A small tax was at the same time levied, but it was too low to keep the jungles from being recklessly thinned. The charge, for instance, for a cartload of red sanders wood was only 1 rupee, while in Cuddapah it was as high as Rupees 6; the natural result was that red sanders almost disappeared, and that the Tirupati forests, in which alone it grew, were handed over to the Deputy Conservator of the Cuddapah District in 1861. In the following year Mr. J. D. Robinson, the Collector, brought conservancy rules for the first time into operation, fixing new rates of seigniorage, and adopting what he styled the "Monigar Ranger and Yánádi gilly" system. Village Monigars collected the seigniorage, and retained 20 per cent. of the receipts as the remuneration of themselves and their watchers.

In 1863, the Board of Revenue proposed that the Vellore and Polúr jungles should be placed under a Deputy Conservator, as the Sub-Collector, Mr. Barlow, had no faith in village conservancy, and was convinced that many saplings were destroyed. Mr. Robinson strongly opposed the measure; but, in 1865, the Thellay and Arasambatt jungles were transferred to the Forest Department, and all the rest of the Vellore

and Polúr forests followed two years later. Previous to this, most of the best trees had been carried away for use upon the railway, while Mr. Sullivan was Sub-Collector, and entrusted with the supply of sleepers to the Company. The forests have not yet recovered from the terrible drain then imposed upon them.

In 1869 it was proposed that all the Gudiyátam and Chandragiri jungles should be put under Imperial Conservancy, but Mr. Robinson again objected on the plea that village grazing rights would be interfered with. The transfer has not yet taken place, but in 1874 the Deputy Conservator was given the management of all locally conserved jungles, accounting to the Collector for his receipts.

Mr. Sheffield, the Deputy Conservator, has kindly furnished the following information upon the subject of forest management, with a list of timber trees and their uses :—

"There are four reserves in this district, viz., the Ambúr and the Mámandúr Railway Fuel Reserves, the reserve known as the Napier Reserve, and the Redwood Reserve.

"The Ambúr Reserve contains six square miles, and was given over to the Forest Department in 1870-71, but on the ryots claiming rights for grazing cattle, Government ordered its abandonment. It was, however, on reconsideration, lately given over again to the Forest Department, and the line is being recleared. The reserve is situated about four miles south-west of the Ambúr Railway Station.

"The Mámandúr Reserve contains 1,777½ acres ; this was also handed over to the Forest Department with the Ambúr Reserve, and as there were no private rights, it has been closely protected since then, and is now almost fit for refelling. It is situated on the north-west line of rail, between the 90½ and 92½ miles from Madras. It was fenced in 1870-71, but during the late scarcity, most of the fencing was destroyed by cattle; they however did little damage to the growing trees.

"The Napier Reserve is situated on the north-west line of rail, from about the 88th to the 95th mile. Its reservation has only lately been sanctioned ; it contains 13 square miles of forest, and was originally granted to the Napier Foundry Company for the manufacture of charcoal for iron-smelting purposes, but on the Company stopping operations, it was recommended and sanctioned as an open timber reserve, as it contains a fair quantity of timber trees of small size, besides a large quantity of redwood, which will in time be very valuable on account of the proximity of the reserve to the Mámandúr Station, from whence timber, &c., can be despatched quickly and cheaply to Madras. The Mámandúr Redwood Reserve is situated in the southern corner of the Napier Timber Reserve, and contains two square miles. This has not been surveyed, or demarcated, as it was only lately approved of by Government; but during 1880-81 it will be surveyed, fenced, and formed into a close reserve, both men and cattle being rigidly excluded. The redwood grows here almost as thickly as though artificially planted, with fine clean straight stems and luxuriant foliage.

"The annexed statement will show the different plantations in existence

in the district under the management of the Forest and Jungle Conservancy Departments, with their area, date of commencement, &c :—

Name of Plantation.	Description of Trees.	Year of commencement.	Area.	No. of Plants standing on 30th September 1879.	Expenditure.			Receipts.		
					Up to 31st March 1879.	From April to September 1879.	Total.	Up to 31st March 1879.	From April to September 1879.	Total.
				Imperial.						
					Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Tiruvallum ...	Casuarina ...	1868	435	200,000	18,367	605	18,972	21,137	...	21,137
2. Virinjipuram ...	Do. ...	1871	260	174,750	13,151	356	13,507	2,724	..	2,724
3. Thonkal ...	Do. ...	1872	110	...	946	...	946	751	...	751
4. Kalminnel ...	Do. ...	1873	150	150,000	5,214	205	5,419	90	..	90
5. Chaynur ...	Mixed hard wood.	1871	129	23,006	5,188	28	5,216	...	...	...
6. Gazulamandium ...	Casuarina ...	1871	250	15,000	3,003	...	3,003	...	...	...
7. Vanniyedu ...	Do. ...	1873	30	15,000	1,387	71	1,458	32	...	32
8. Ammundi ...	Do. ...	1873	160	49,170	2,528	37	2,565	...	...	...
9. Ammerdi ...	Mixed trees (experimental).	1867	25	8,000	3,375	81	3,456	2,022	880	2,902
	Total ...	...	1,549	6,84,020	53,159	1,383	54,542	26,756	880	27,636
				Local.						
1. Palmaner ...	Sandalwood ...	1873	2	1,583	1,050	24	1,074	...	...	...
2. Nangamangalum ...	Casuarina ...	1873	30	12,500	2,252	12	2,264	...	...	...
3. Oodugalapalle ...	Sandalwood ...	1873	1	1,105	475	12	487	...	...	...
4. Pedugavaripalle ...	Casuarina ...	1873	20	5,100	1,726	65	1,791	...	...	...
5. Venkatagirikota ...	Eucalyptus }	1873	4	{ 1,000	216	33	249	...	...	...
6. Do.	Mixed }			{ 1,473	1,240	45	1,285	...	...	...
7. Thandrayagunta ..	Casuarina ...	1873	2	1,900	416	23	439	...	...	...
8. Arkonam ...	Mixed ...	1877	37	16,000	3,256	277	3,533	...	...	...
9. Baireddipalle ...	Chinchona and Eucalyptus.	1879	5	100	...	278	278	...	...	...
	Total ...	...	101	40,761	10,631	769	11,400	...	...	...

"Up to 1865 Imperial Conservancy in the district was carried out by the Deputy Conservator of the Cuddapah District, with a small establishment consisting of—

		Rs.
1	Overseer on Rupees 60 + 15	75
1	Duffadar	20
1	Do.	15
2	Pygusts at Rupees 8 each	16
17	Peons at Rupees 6 each	102
	Total ..	228

but in 1870, as the value of the forests became manifest, and the demand for their produce greater, an Assistant Conservator of Forests was appointed to take charge, and from that time to the present there has been a steady increase of revenue, while at the same time the forests have been preserved from the destruction which was imminent at the time he took charge.

"In 1874 and the current year two strips of forest on the Jewádi hills, of at least 30 square miles in area, belonging to the Salem District, but more easily worked by North Arcot than by Salem, have been transferred to North Arcot; one of the strips is a valuable sandalwood tract; the other contains much fine nummay (*Conocarpus latifolius*). They will probably both be formed into reserves.

"The forest establishment as it stands now is as follows:—

			Rs.
Deputy Conservator of Forests on Rupees	350 + 150		500
1 Forest Ranger	80 + 20		100
1 Do.	60 + 15		75
2 Foresters at Rupees 30 each			60
1 Forest Guard			8
14 Do. at Rupees 7 each			98
1 Head Clerk			30
1 2nd Do.			20
1 Ranger's Gumastah			10½
1 Peon			8
2 Peons at Rupees 7 each			14
		Total ..	923½

"The annual Imperial Forest revenue of the past fourteen years is as follows:—

	Rs.		Rs.
1866-67	2,743	1873-74	16,898
1867-68	9,899	1874-75	20,624
1868-69	11,125	1875-76	17,813
1869-70	8,236	1876-77	22,841
1870-71	13,948	1877-78	20,448
1871-72	16,446	1878-79	24,521
1872-73	19,830	1879-80	40,000 estimated.

"The local jungles are under the Collector, and the revenue derived from them is applied to local purposes, but they are supervised by the Deputy Conservator of Forests.

"The private forests of 671 square miles give more revenue than the Government forests of 1,184 square miles, because while Government tracts are being reserved private forests are not, and will soon be exhausted; indeed, this has already begun; Kangundi is almost exhausted, and the Railway Company's contractors are now making arrangements with the Deputy Conservator for felling fuel in the Vellore Taluk and in the local jungles of Gudiyátam and Palmanér.

"The Jungle Conservancy Establishment is as follows:—

		Rs.
1 Forest Ranger on Rupees	45 + 15	60
1 Forester on ,,	30 + 10	40
1 Do. on ,,	20 + 10	30
1 Forest Guard		8
17 Do. at Rupees 7 each		119
6 Do. at ,, 6 ,, ...		36

Deputy Conservator's Office Establishment.

1 Gumastah	15
1 Peon	7
1 Do.	6
Total ..	321

"The annual jungle conservancy revenue for some years after its being placed under the control of the Deputy Conservator of Forests is as follows:—

	Rs.	
1873-74 ..	.. 12,962	Taken over by Deputy Conservator.
1874-75 ..	.. 10,678	
1875-76 ..	.. 26,738	Much sugar boiling this year.
1876-77 ..	.. 19,186	
1877-78 ..	.. 7,807	Excessive famine prevalent.
1878-79 ..	.. 12,725	
1879-80 ..	.. 16,000	Estimated.

"Up to the time that the local jungles were placed in charge of the Deputy Conservator there was no establishment to protect the jungles, their care being left to the heads of villages living near them, who issued licenses for felling, and collected the seigniorage, without check or control, with the inevitable result that they enriched themselves at the expense of Government and destroyed the jungles; but on his assuming charge, a set of rules were framed for all the jungles and forests of the district. The forests and jungles were divided into beats or firkas; a Forest Guard or Peon was given charge of each beat, a Forester to all the beats of a taluk, and a Forest Ranger was in charge of two taluks.

"Licenses numbered, signed, and sealed by the Deputy Conservator are issued to heads of selected villages (called firkadars), and they are instructed to issue licenses to all applicants for all forest produce of the seigniorage value of one rupee per bandyload and under, but for all timbers of a higher seigniorage, applicants have to apply to a Tahsildar, Deputy Tahsildar, or Forest Officer. All licenses issued by firkadars are in duplicate; the original and duplicate are filled in by the firkadar with—

1. Date of issue.
2. Name of the timber or other forest produce.
3. Name of the forest.
4. Bandy, bullock or head loads.
5. To whom granted and residence.
6. Date of expiration.
7. Tannah where to be registered.

"A copy is also entered by the firkadar in a register kept by him, and the original license given to the applicant on payment of seigniorage. When the applicant has felled his timber, or whatever it may be, he has to cart it past the forest tannah, and here the wood is compared with the description given in the license, and if found correct the firkadar signs to that effect on the back of the original and duplicate licenses, enters it in his docketting register, returns the original license to the holder, and allows him to pass with his wood. The license cannot be used a second time, as the firkadar's endorsement is a proof that the wood named in the face of the license has already been taken. To prevent the firkadars from misappropriating seigniorage the Forester and Forest Ranger constantly visit their tannahs, and inspect the books, &c., and as a further check, compare the duplicate licenses sent to the Forester's office with the list of licenses issued, and seigniorage collected, and sent monthly to the Taluk Treasury. Several cases of misappropriation have been discovered and prosecuted to conviction

"The system is not perfect, it does not make fraud impossible, but it affords a fair means of discovering any fraud committed, and seems the best under the circumstances that can be introduced.

"It was formerly the practice in the Imperial forests to require every person wanting a license to come to the Forest office for it, but this was found not to answer. Persons who would willingly have paid the seigniorage, if they could have procured a license near their homes, preferred going without the wood; or if they could not do without it, they preferred going to the forests without a license, and risking detection, rather than go perhaps 30 or 40 miles, to and from the Forest office, for a license for an 8-anna bandy-load of bamboos, or a load of fuel, as the case might be.

"The redwood (*Pterocarpus santalinus*) is the most valuable wood in the district. It is only found in the northern taluks, Chandragiri, Kálahastri, Kárvétnagar, and to some extent in Chittoor. The tree grows best on low hills, in red gravelly soil, and is seldom found of more than a foot diameter, and yields a post not more than 8 or 9 inches in diameter, but these are greatly prized by the people, being used for verandah posts and other purposes, as much as Rupees 10 being sometimes given at Madras for one of such dimensions. The roots and stumps of trees that have been felled for timber are sent to Europe as a dye wood, and as the wood is almost imperishable, there is a large quantity of roots to be found in the forests, some of the trees having been felled perhaps fifty years ago. The roots are dug up on contract, at so much per ton, and brought to the forest depôts where they are sold to merchants for export to Europe, and the Forest Department realizes about cent. per cent. profit on the transaction. The present price paid for digging up and carting to depôt is Rupees 8 per ton, and the selling price to merchants Rupees 15 per ton. The purchasers take the wood to Madras by rail; there it is sawn up into small billets, and shipped, sometimes as dunnage, but more often as part of the ship's cargo. When used as dunnage, the freight from Madras to London is sometimes as low as Rupees 10 per ton, but when shipped as part of the cargo, as much as Rupees 25 is paid per ton as freight. The market price in London is from £5 to £7 per ton.

"The following is a list of the principal timber trees, fancy woods, &c., growing in the district with some of their uses:—

No.	Scientific and Vernacular Names.	Uses.
1	Acacia Arabica .. .. Kari-vélan, *Tam.* Nalla-tumma, *Tel.*	The gum is used in place of Gum Arabic, the bark for medicinal purposes, and tanning leather, the leaves after being burnt and mixed with cocoanut-oil, for external application to itch; the seeds and pods as articles of food for sheep, goats, &c., and the timber for making plough-shares, wheels, &c.
2	Acacia farnesiana .. Vadayvalli, *Tam.* Kasturi, *Tel.*	Only used for firewood.
3	Acacia ferruginea .. Vel-vélan, *Tam.* Tumma, *Tel.*	The bark forms an ingredient in the manufacture of arrack.

No.	Scientific and Vernacular Names.	Uses.
4	Acacia leucophlœa .. Vela vélan, *Tam.* Tella tumma, *Tel.*	The fibre prepared from its bark is used for large fishing nets, and coarse kinds of cordage; the wood is only valued as fuel.
5	Acacia sundra .. .. Karangálé, *Tam.* Chandra, *Tel.*	Well suited for fencing posts and rice pestles.
6	Ægle marmelos .. .. Vilva, *Tam.* Márédu, *Tel.*	The root, bark, leaves and fruit are all medicinally used. The fruit alone is the best remedy for diarrhœa and dysentery. Native drums are made of this wood, and the tree is considered by the natives to be sacred to Siva.
7	Agati grandiflorum .. Ávati, *Tam.* Avisi, *Tel.*	The wood is only fit for fuel, and the tree is generally planted to support and shelter the piper-betel.
8	Ailanthus excelsus .. Periamaram, *Tam.* Pedda mánu, *Tel.*	The wood is used for pandals, sword handles, sheaths for spears, &c.
9	Alangium lamarkii .. Alingi, *Tam.* Ûdaga, *Tel.*	This is a most beautiful wood, but of small size. It does not appear to be known much, but from specimens in the Forest office, I have no doubt that if known it would be largely used for small articles of furniture, inlaying, veneer, &c.; wooden bells tied to the neck of the leading bull of a herd are made of this wood.
10	Albizzia amara .. .. Turinji, *Tam.* Sicarani, *Tel.*	One of the best and most plentiful trees for railway fuel.
11	Albizzia lebbek .. .. Kátu-vágai, *Tam.* Dirisana or Bági, *Tel.*	The wood is used for beams in building, for sugar mills, pestles, mortars, and plough-shares, and sometimes for furniture for which it is well suited, if carefully selected from large well grown trees.
12	Albizzia odoratissima .. Kaṭṭu vágai, *Tam.* Dirisana, *Tel.*	Carts and naves of felloes of wheels are made of this wood, it is also useful for house building and general purposes of carpentry.
13	Albizzia stipulata .. Kaṭṭu vágai, *Tam.* Dirisana, *Tel.*	Adapted for cabinet making, furniture, cart-wheels, bells for cattle, and other purposes.
14	Alphonsea lutea .. ——————, *Tam.* Chiredudduga, *Tel.*	For fuel.
15	Amanoa collina .. Woudugu, *Tam.* Wodesha, *Tel.*	The wood is useful for carpentry, but of small size; a good fuel wood.
16	Anacardium occidentale. Mundri, *Tam.* Muntú mámidi, *Tel.*	One of the best woods for charcoal for ironsmiths. The oil from the nut is applied to floors, or wooden rafters of houses, to keep away white ants. Its gum collected from the roots is substituted for Gum Arabic, and forms a good varnish.
17	Areca catechu .. .. Páku, *Tam.* Póka, *Tel.*	The nuts are chewed by the natives, and are said to preserve the teeth.
18	Artocarpus integrifolia.. Polá, *Tam.* Panasa *Tel.*	The wood is in general use for building boats, and for all furniture, musical instruments, ornamental works, &c. The fruit when green and the pulp and seeds when ripe are used in curries, and the fruit itself is eaten when ripe.
19	Atalantia monophylla .. Kátyellamicham, *Tam.* Adivinimma, *Tel.*	Only used for cabinet purposes, as it is of small size.
20	Azadirachta Indica .. Vépam, *Tam.* Vépa, *Tel.*	The leaves, bark, seeds and oil are all medicinally used by natives, and the wood is fit for ornamental purposes.

No.	Scientific and Vernacular Names.	Uses.
21	Bassia latifolia .. .. Illupa, *Tam.* Ippa, *Tel.*	The flowers are eaten raw, and used in distilling arrack. The wood is used for door and window frames, and naves and felloes of wheels.
22	Bassia longifolia .. Illupa, *Tam.* Ippa, *Tel.*	The wood is used for dhonies, bridges, and house building. It is said to be a good wood for trenails. The oil from the seeds makes excellent candles and soap, and is in some places substituted for butter by natives. The leaves, milk of the green fruit, and the oil are all used as medicines.
23	Bauhinia purpurea .. Shegapu manthari, *Tam.* Bodanta, *Tel.*	Useful for agricultural implements.
24	Bauhinia racemosa .. Kát agati, *Tam.* Adavi avisa, *Tel.*	The wood is adapted for fancy work and cabinet making, the bark for making matches and good strong ropes, its gum is used medicinally, and its seeds are roasted and eaten.
25	Bergeru konigii .. Kari vépálé, *Tam.* Karépáku, *Tel.*	The leaves dried and green are used by the natives and Europeans to flavour curries, &c. The leaves are further used in dysentery, and to stop nausea.
26	Berrya ammonilla .. Tiricanámalay, *Tam.* Saraladóvadari, *Tel.*	The wood is employed in the construction of masula boats, and for the spokes of wheels, for helves, handles, pannels, frames, carriages, &c., and for furniture.
27	Bombax malabaricum .. Yellava, *Tam.* Búraga, *Tel.*	Useful for light packing cases, planks, doors and boxes where not exposed. The cotton is used for stuffing cushions and pillows.
28	Borassus flabelli formis.. Pané, *Tam.* Táṭṭi, *Tel.* (The palmyra).	The timber is chiefly used for house building, rafters, joists, reepers, &c., the leaves for thatching, for making baskets and pans, for writing upon with an iron style, &c., the fibres are employed for making twine and small rope, the seeds when young are eaten by the natives, and jaggery and toddy are extracted from the flower shoots, &c.
29	Boswellia glabra .. Kungiliu, *Tam.* Guggilapu, *Tel.*	The wood is of no value, it yields a resin which is burnt as an incense in religious ceremonies.
30	Briedelia spinosa .. Malei véngé, *Tam.* Korra, *Tel.*	The wood is generally used for frames of wells, it is said that cattle eat the leaves, which are an antidote for worms.
31	Buchanania latifolia .. Sára parippu, *Tam.* Sára pappoo, *Tel.*	The wood is generally worked into furniture, house-doors and windows, presses, tables, &c. The seeds are cleaned and the kernels roasted and eaten by natives, and are much liked by Europeans who have tasted them; the seeds sell as high as a rupee per measure.
32	Butea frondosa .. Porasa, *Tam.* Moduga, *Tel.*	The wood is used for house purposes, and the flowers and gum are valuable, as the former gives a bright yellow dye and the latter is used in native medicines.
33	Butea parviflora .. Pappali, *Tam.* Paranki, *Tel.*	The gum which this tree yields is medicinally used.
34	Canthium parviflorum .. Sengarary maram, *Tam.* Nalla balasu, *Tel.*	The wood is well fitted for turning small objects, being close grained and hard.
35	Careya arborea .. Kambi, *Tam.* Kambi, *Tel.*	It is useful for gun-stocks, &c.; its fibrous bark is used as matches for match locks. The Ordnance Department, when searching for a wood suitable for fuses to be used instead of the English beech, were recommended to try this wood, and did so, pronouncing it in every way suitable for the purpose. It has since been sent for trial to the Bengal and Bombay Presidencies.

No.	Scientific and Vernacular Names.	Uses.
36	Cassia auriculata .. Avárampattai, *Tam.* Tanghédu, *Tel.*	The bark is used for tanning, and the stems to make native tooth-brushes.
37	Cassia fistula	A small tree with very hard wood, suitable for posts, &c. The tree when in flower would be beautiful were it not that it is bare of leaves at the time.
38	Cassia Roxburghii .. Konné, *Tam.* Suvarnam, *Tel.*	This is a very beautiful tree when in flower. In its foliage, it has much the appearance of the willow: the wood is not known.
39	Cassia florida .. .. Sima ávváram, *Tam.* Sima thangédu, *Tel.*	The wood is used for helves, walking sticks, mallets, &c. It is a capital firewood and the tree grows well as coppice.
40	Casuarina equisitifolia.. Chouk, *Tam.* Serva or chouk, *Tel.*	The wood is well adapted for posts, and is used as firewood: 1,000 lbs. of this wood is equal to 1,300 lbs. of the ordinary jungle-wood when used as fuel.
41	Cathartocarpus Roxburghii. Segapu konné, *Tam.* Suvarna, *Tel.*	Same as No. 37.
42	Chloroxylon suretenia .. Burisha, *Tam.* Billu, *Tel.*	The wood is suited for all kinds of ornamental purposes, and is used for axle-trees, oil-presses, posts, naves of wheels and for fuses. The leaves are applied to wounds. This is satin wood.
43	Cocos nucifera, cocoanut. Tenna, *Tam.* Tenkáya, *Tel.*	The stem is used for ridge-poles, small boats, beams, posts and rafters of houses; also when polished for fancy boxes, and furniture, and several other purposes. Ropes and different articles are made of the fibrous husk of the nut; the shell is equally valuable for small cups, ladles, &c. The nut is well known as an article of food and for the oil it gives. The refuse of the nut after the oil is expressed is used as manure.
44	Conocarpus latifolia .. Namma, *Tam.* Yellama, *Tel.*	Used especially for building purposes, axles of carts yokes, shafts, furniture, &c.
45	Cordia myxa .. .. Vídi, *Tam.* Pedda botuku, *Tel.*	The timber is only fit for firewood; its fruit and seed are used in medicines.
46	Crataeva Roxburghii .. Mávalinga, *Tam.* Tella ulli, *Tel.*	Temple cars, native dolls, &c., are made of this wood; the juice and decoction of the bark are given in intermittent and typhus fevers.
47	Dalbergia latifolia .. Sórákotté, *Tam.* Jidiga, *Tel.*	The wood is used for cabinet work, knees of vessels, agricultural implements, combs, &c., and for various works in the Gun Carriage Manufactory. This is the rosewood or black wood of commerce.
48	Dalbergia paniculata .. Putchalai, *Tam.* Putchari, *Tel.*	Wood useless even for fuel.
49	Dichrostachys cinerea .. Vedataré, *Tam.* Yellituru, *Tel.*	The wood is strong and good, but too small for any purposes.
50	Diospyros chloroxylon .. Tumbi, *Tam.* Pedda ulinda, *Tel.*	The wood is small but useful for many purposes; the fruit is edible. This is one of the ebonies.
51	Diospyros cordifolia .. Tumbi, *Tam.* Nalla urimida, *Tel.*	The wood is used by natives for many economical purposes. This is also one of the ebonies.
52	Diospyros ebenum .. Tumbi, *Tam.* Tukki, *Tel.*	Used for sleepers, and by the natives in the manufacture of carriages. This is the true ebony.
53	Diospyros melanoxylon.. Tumbi, *Tam.* Tukki, *Tel.*	Boxes are made of this wood and the fruit is eaten (ebony).

No.	Scientific and Vernacular Names.	Uses.
54	Dodonæa Burmanniana..	The wood is small but hard, and used for carving, and for handles of tools.
55	Emblica officinailis .. Nelli, *Tam.* Nelli or usirika, *Tel.*	Used for boxes, also for well rings. The bark is used for tanning and in dysentery and diarrhœa: the fruit is pickled or preserved in sugar.
56	Eriodendron anfractuosum. Elavam, *Tam.* Búruga, *Tel.*	Useful for toy making, likewise for floats, the silky wool in the seeds is used for stuffing pillows.
57	Erythrina Indica .. Kaliana murukan, *Tam.* Badapuchettu, *Tel.*	For light boxes, scabbards, children's toys, &c. A beautiful tree when in flower.
58	Erythrina suberosa .. Murraka, *Tam.* Móduga, *Tel.*	For sieve frames: valuable for its beautiful flowers.
59	Erythrina sublobata .. Mullu murraka, *Tam.* Mullu móduga, *Tel.*	Employed by muchies in making trunks, toys and other things that are to be varnished: valuable for its beautiful flowers.
60	Erythroxylon arcolatum. Chembadichan, *Tam.* Dévadári, *Tel.*	Used in Mysore in lieu of sandal; its leaves are eaten as greens, and are applied to the head after bruising and mixing with gingelly oil.
61	Eugenia jambolana .. Perianága, *Tam.* Néradi, *Tel.*	The wood makes excellent beams, and is also used for agricultural implements.
62	Euphorbia tirucalli .. Kalli, *Tam.* Manchi jammudu, *Tel.*	Used for the flat mud roofs of houses.
63	Feronia elephantum .. Vellá, *Tam.* Vellaga, *Tel.*	Used in house building; the oil obtained from its trunk is used by painters for mixing their colours; it yields a gum very much resembling Gum Arabic. The young leaves are used as medicine in enteric complaints of children: the pulpy part of the fruit is edible.
64	Ficus benjamina .. Vella pappai, *Tam.* Tella jarranki, *Tel.*	Used for fuel, but is not a good one.
65	Ficus glomerata .. Atti, *Tam.* Atti, *Tel.*	Used for foundations, for the masonry lining of wells, and for lining; a medicinal extract is obtained from its root.
66	Ficus Indica .. .. Ala, *Tam.* Marri, *Tel.*	The droops of this tree are valued for tent poles, spars of small vessels, &c. When the roots are well prepared by seasoning, &c., they are excellent for knife boards.
67	Ficus religiosa ..	The wood is fit for nothing but fuel, and bad even for that purpose.
68	Gardenia latifolia .. Malei mánga, *Tam.* Konda mánga, *Tel.*	A small tree, the wood fit for turning, nearly equal to box.
69	Gardenia lucida .. Kambi, *Tam.* Tella mánga, *Tel.*	Used for making combs, the disagreeable resin obtained from it is used by native doctors, dissolved in spirits, as an external application for cleansing foul ulcers.
70	Givottia rottleriformis .. Putalli maram, *Tam.* Tella poonkey, *Tel.*	The wood being light is fit only for making models, dolls, &c.
71	Gmelina arborea .. Gumudu, *Tam.* Gumudu taku, *Tel.*	Used for house posts, planks and carving images, picture frames, decking small boats, venetian blinds, sounding boards, palanquin panels, gram measures, &c.
72	Grewia rothii .. .. Jana, *Tel.*	The wood is a very good fuel.
73	Guatteria cerasoides .. Duddaga, *Tel.*	The wood is useful in general carpentry, as well as for naval purposes.

No.	Scientific and Vernacular Names.	Uses.
74	Hardwickia binata .. Aché maram, *Tam.* Tuki, *Tel.*	Used for inlaying beams for European houses, troughs for water, &c., and a tough fibre is procured from its bark. A very hard heavy good wood, but natives do not like to use it in their houses as the Tamil name sounds like the enquiry "Is it all over ?"
75	Hemigymnia macleodii .. Botku, *Tel.*	Used for picture frames. A small tree.
76	Indiga dulcis .. .. Korakápalé, *Tam.* Síma chinta, *Tel.*	This is a valuable hedge plant, and the pulp of the fruit is edible; the wood is a good fuel wood, the tree grows well as coppice.
77	Ixora parviflora .. Kóráng katté, *Tam.* Gurrivi katta, *Tel.*	This with its sweet scented flowers forms a very fit ornament for gardens and pleasure grounds, and the wood is used for buildings of the poor, for torches, and for firewood.
78	Lagerstræmia macrocarpa Vontéku, *Tam.* ——, *Tel.*	Fit for many household purposes and for the decks of ships, &c.
79	Lagerstræmia parviflora .. Chinna nagi, *Tel.*	Much used for beams, rafters, &c.
80	Lawsonia alba .. .. Alavanam, *Tam.* Gorinti, *Tel.*	A good hedge and fence plant; the leaves and bark are used medicinally, and the former in dyeing hair, skin and nails red. This is the Méndhi of the Mahommedans.
81	Limonia alata .. .. Kát yelloomitcha, *Tam.* Adivi nimma, *Tel.*	The wood would be valuable if procurable in adequate size.
82	Mangifera Indica .. Mango, *Eng.* Mángá, *Tam.* Mámidi, *Tel.*	Employed generally for packing cases, boarding and rough work. The fruit is well known, being often pickled.
83	Melia azedarach .. Malé vémbu, *Tam.* Konda vépa, *Tel.*	Fit for making idols and for well curbs, planks and furniture.
84	Melia sempervirens ..	Valuable for beams, roof, dunnage for terraces and many other purposes.
85	Memecylon tinctorium .. Alli, *Tel.*	Much used for agricultural implements, carts, &c.
86	Michelia champaca .. Shembó, *Tam.* Sampangi, *Tel.*	Fit for handsome furniture, has a beautiful sweet smelling flower.
87	Mellingtonia hortensis ..	Cultivated for ornament and for avenue trees.
88	Mimusops elengi .. Paghadam, *Tam.* Pogada, *Tel.*	This is an ornamental tree with fragrant flowers, from which an oil is extracted, fit for beams and rafters.
89	Mimusops hexandra .. Pála, *Tam.* Pála, *Tel.*	Used for rulers, knobs, handles of tools and other articles of turnery, also for beams, &c., &c.
90	Morinda citrifolia .. Nonná, *Tam.* Surradu, *Tel.*	Unfit for use as timber, but used for common purposes, such as wooden sandals, &c. A yellow colouring matter is procured from the roots and bark, and used for dyeing handkerchiefs, turbans, &c.
91	Morinda tinctoria .. Surruttu, *Tam.* ——, *Tel.*	Excellent for gun-stocks, and the bark of the roots is used as a red dye.
92	Nauclea cadamba .. Vella kadamba, *Tam.* Kodamba, *Tel.*	Suitable for various kinds of furniture, and planking when not exposed.
93	Nauclea cordifolia .. Munja kadamba or vellári, *Tam.* Bundari, *Tel.*	Used for common purposes, and well suited for house carpentry and furniture.

No.	Scientific and Vernacular Names.	Uses.
94	Naucles parvifolia .. Nirkadambay, *Tam.* Butakarami, *Tel.*	Fit for flooring planks, packing cases, yokes, posts, agricultural instruments, small beams, &c.
95	Nyctanthes arbor-tristis..	Valued for its fragrant flowers, the bark is used for tanning, and the flowers for dyeing silk a yellow colour.
96	Odina wodier .. .. Udaé, *Tam.* Gumpana, *Tel.*	Used for sheaths of swords, spear handles, oil-presses and rice pounders.
97	Perkinsonia aculeata .. Súna jiluga, *Tel.*	Valuable for hedges, and furnishes abundant cuttings for fuel. The fibre from its stem is valuable as a paper material.
98	Phœnix sylvestris ..	Useful for temporary bridges and piers; its juice as palm wine which is converted into sugar.
99	Phyllanthus emblica .. Nelli, *Tam.* Usarika, *Tel.*	The bark is used for tanning, and the fruit is pickled or preserved in sugar. The fruit is one of the ingredients for making ink.
100	Poinciana elata .. Padda náráyan, *Tam.* Sunkaishla, *Tel.*	Good for cabinet-maker's work; the leaves are used as a manure for indigo fields.
101	Poinciana regia, flame of the forest or goldmohur tree. Neruppu konné, *Tam.*	Not useful for timber, but pleasing from the beauty of its feathery foliage and brilliant red flowers.
102	Pongamia glabra .. Punga, *Tam.* Kánaga, *Tel.*	Only used for firewood, and the oil from the fruit and the pod are used medicinally and for lamps. The leaves and boughs are used as manure for paddy, and the faded flowers for sugar-cane.
103	Premna integrifolia .. Munné, *Tam.* Pinna nelli, *Tel.*	Fit for common purposes.
104	Premna latifolia .. Nelli, *Tam.* Nelli, *Tel.*	Used for various economical purposes.
105	Premna tomentosa .. Kolkatté téku, *Tam.* Nagara, *Tel.*	Well fitted for ornamental purposes.
106	Prosopis spicigera .. Parambi, *Tam.* Jánam, *Tel.*	Used for bandy wheels and other common purposes. The pods are eaten by natives.
107	Psidium pomiferum .. Red guava, *Eng.* Segappu kové, *Tam.* Yerra góva, *Tel.*	The root and young leaves are esteemed useful in strengthening the digestion.
108	Psidium pyriferum .. Kové, *Tam.* Gova or jámam, *Tel.*	The fruit is edible, and the wood useful for handles of tools, mallets, pegs, &c.; gun-stocks are made from the old wood.
109	Pterocarpus marsupium. Vénga, *Tam.* Vegi or yégi, *Tel.*	One of the best woods for building purposes and the best for railway sleepers; it yields the valuable gum kino.
110	Pterocarpus santalinus. Segapu chandanam, *Tam.* Erra chandanam, *Tel.*	Very much used as a dye-wood and by color manufacturers; also in turnery. Hindu images are made of this wood; posts of this are much prized by Hindus for house-building.
111	Pterospermum subcrifolium. Taddi maram, *Tam.* Lolagu, *Tel.*	Useful for many purposes, such as poles of bullock-carts, betel trays, and gun-stocks.
112	Punica granatum .. Mádalam, *Tam.* Dalima, *Tel.* Pomegranate, *Eng.*	The wood is used by the natives for roofs, and its fruit is largely used for making sherbet.
113	Putrangiva Roxburghii. ———, *Tam.* ———, *Tel.*	Good for turnery and for implements, the nuts are threaded as necklaces and armlets.

No.	Scientific and Vernacular Names.	Uses.
114	Rottlera tinctoria .. Kapila, *Tam.* Kapili or kankumapuvu, *Tel.*	The wood is of an inferior quality, but the mealy powder covering the capsules yields a valuable dye, chiefly used in dyeing silk of an orange colour; this forms an article of commerce.
115	Santalanum album .. Sandalwood, *Eng.* Chundanam, *Tam.* Chandanam, *Tel.*	Remarkable for its agreeable fragrance; used for boxes, work boxes, walking sticks, and other small articles of fine ornament. Hindus use it reduced to powder to form the sectarian marks on their forehead. A very valuable oil is distilled and used as a perfume.
116	Schrebera suretenioides. Mávalinga, *Tam.* Móga, *Tel.*	Much employed by weavers for the beams and for many other parts of their looms.
117	Schleroatylis atulantoicles Adavi min, *Tel.*	A very hard wood.
118	Semecarpus anacardium. Shórang kotté, *Tam.* Nalla jidiga, *Tel.*	Adapted for fancy work and cabinet making.
119	Seltica Indica .. Dévadari, *Tam.* Adavi goranta, *Tel.*	Is a small tree, but the wood is fragrant and is used as a substitute for sandalwood in Mysore. A wood tar for preserving timber employed in the construction of native boats is obtained from it.
120	Shorea laccifera .. Jálári, *Tam.* Jálári, *Tel.*	Is a strong and useful wood for various purposes such as beams, joists, rafters, &c.
121	Shorea tumbuggaia .. Shumbugum, *Tam.* Thámba, *Tel.*	Chiefly used for building purposes, also for fuses. A large quantity of resin called dammar is obtained from it and substituted for pitch in marine yards; also used as incense in temples.
122	Soymida febrifuga .. Shom, *Tam.* Sómida, *Tel.*	Much used in buildings, and the bark is a useful tonic in intermittent fevers.
123	Spathodea rhudii .. Woddi, *Tel.*	A beautiful tree used for yokes and cart poles.
124	Spondias mangifera .. Kát mángáy, *Tam.* Adavi mámidi, *Tel.*	Wood of no use, except for firewood; yields a gum like Gum Arabic, and its bark and the wood itself are useful as medicines.
125	Sterculia foetida .. Kudrapudookoo maram, *Tam.* Gurrapubadam chettu, *Tel.*	Used for common house-building purposes.
126	Sterculia guttata .. Ramenapu maram, *Tam.*	The bark is converted into a flaxy substance, of which a sort of clothing and cordage are made.
127	Sterculia urens .. Vella puttale, *Tam.* Thabsi, *Tel.*	Only fit for the most common purposes; the seeds are roasted and eaten by the natives, and the leaves are used in cattle diseases. A sort of gum is also obtained.
128	Sterculia villosa ..	Fine, strong, and lasting ropes, bagging, and paper are made from the inner layers of the bark. Elephant ropes for dragging timber are made from the bark of this tree.
129	Stereospermum chelonoides. Padari, *Tam.* Móka yepa, *Tel.*	A good fancy wood and also suitable for buildings. The bark, fruit, and leaves are used medicinally.
130	Stereospermum suaveolens Padari, *Tam.* Padari, *Tel.*	Used for buggy shafts and bows, and for native buildings; the bark is employed medicinally.
131	Strychnos nux vomica .. Yetti, *Tam.* Mushti, *Tel.*	Used for plough shares, cart wheels, cots, fancy work, and cabinet making; produces the poison strychnine. Iron tools are sharpened on blocks of this wood.

No.	Scientific and Vernacular Names.	Uses.
132	Strychnos potatorum .. Téthankotté, *Tam.* Chilla ginga, *Tel.*	Used for firewood, bandy wheels, plough shares, and several economic purposes; the seeds are used by natives for purifying muddy water.
133	Tamarindus Indica .. Tamarind, *Eng.* Pulia, *Tam.* Chinta, *Tel.*	Used for sugarcane and oil mills, naves of wheels, mallets, rice-pounders, and for furniture and building purposes; the fruit is well known.
134	Tectona grandis .. Tek, *Tam.* Téku, *Tel.*	Used for ship building, house building, furniture, &c.
135	Terminalia alata .. Maradam, *Tam.* Muddi, *Tel.*	Used for house building and canoes.
136	Terminalia arjuna .. Vella marddamum, *Tam.* Tella maddi, *Tel.*	Used for tie-beams, rafters, &c., and the bark for application to wounds.
137	Terminalia telerica .. Tándri, *Tam.* Tándri, *Tel.*	The fruit is used medicinally.
138	Terminalia catappa .. Náttu bádam, *Tam.* Bádam, *Tel.*	Chiefly used as posts and for firewood; the kernel is eaten and is palatable.
139	Terminalia chebula .. Kaduká, *Tam.* Karakáya, *Tel.*	The wood is used for beams and rafters of houses and the seeds for tanning and making ink. The fruit is well known for its dyeing properties, the myrobalans of commerce.
140	Terminalia coriacea .. Arremuti, *Tam.* Karra maradu, *Tel.*	Used for beams and pillars for houses; also for ships and boats.
141	Terminalia glabra .. Karapu maradam, *Tam.* Nulla maddi, *Tel.*	Readily procurable of large size for house building, and used for flooring cattle sheds, for rice-pounders, &c.; the bark is used for tanning.
142	Terminalia tomentosa .. Maradam, *Tam.* Nalla maddi, *Tel.*	Make good beams and rafters.
143	Thespesia populnea .. Púvarasan, *Tam.* Gangarani, *Tel.*	Wood used for chairs, gun-stocks, and furniture; often grown in avenues.
144	Trophis aspera .. Bári venka, *Tel.*	Used chiefly for firewood; the leaves are said to be used to polish horns and ivory, and the bark, leaves, and sap medicinally.
145	Ulmus integrifolia .. Ayi, *Tam.* Pedda nowli, *Tel.*	Used for carts, door frames, &c.; the wood yields a peculiar odour to boiling water, which is mixed with common arrack and improves its flavour; the forks of the branches are used by the natives to protect their straw from cattle.
146	Vachella farvesiana .. Veda valli, *Tam.* Kastúri trimma, *Tel.*	Makes excellent ship's knees and tent pegs, and exudes much gum.
147	Vateria Indica .. Vellay kungilam, *Tam.* Dupadu chettu, *Tel.*	An excellent and valuable building timber; produces the resin called copal.
148	Vatica laceifera .. Jálári, *Tel.*	Very valuable for building purposes.
149	Vitex altissima .. Kát mailam, *Tam.*	The tree is of great beauty when in flower and yields a very valuable timber.
150	Vitex arborea .. Novali adugu, *Tel.*	Useful for various ordinary purposes.
151	Vitex lencoxylon .. Nevaládi, *Tel.*	Useful for furniture and cart wheels.
152	Vitex negundo .. Vella nochili, *Tam.* Vavili, *Tel.*	The leaves and roots are used medicinally.

No.	Scientific and Vernacular Names.	Uses.
153	Vitex trifolia .. Nir nochili, *Tam.* Vávili, *Tel.*	Used for bridges, water casks, cart and wagon wheels, bullock carts, water tubs, and house buildings.
154	Wrightia antidysenterica Vepála, *Tam.* Pála or rippála, *Tel.*	The wood is of little use, but the bark is valuable for its medicinal property.
155	Wrightia tinctoria .. Chinna Vénga, *Tam.* Jitti véga, *Tel.*	Valuable for turning, and the leaves yield an inferior kind of indigo.
156	Wrightia tomentosa .. Koila mukri, *Tel.*	The juice is a permanent yellow dye, and the bark is given internally for scorpion bites.
157	Zizyphus glabrata Kurkatta, *Tam.* Kakupala, *Tel.*	Used for ploughs, and the bark yields a sort of gum.
158	Zizyphus jijuba .. Yellande, *Tam.* Régu, *Tel.*	The fruit is sweet and palatable; the wood is fit for planks or sleepers, implements of husbandry, &c.
159	Zizyphus xylopyrus .. Gotte, *Tel.*	Used for torches, buildings, and implements. The fruit is employed by shoe-makers to blacken leather and to make blacking.

RAILWAY.

The mileage of the railway within the district is—

Madras Railway—

South-West Line	86	Miles.
North-West Line	55	,,
Bangalore Branch	20	,,
South Indian Railway	10	,,

The Stations are—

South-West Line—

Chinnamápett, at the	38th	Mile.
Arkónam, at the	42nd	,,
Shólinghur, at the	55th	,,
Arcot, at the	65th	,,
Tiruvallam, at the	73rd	,,
Vellore, at the	80th	,,
Virinjipuram, at the	88th	,,
Gudiyátham, at the	95th	,,
Mélpatti, at the	105th	,,
Ambúr, at the	112th	,,

North-West Line—

Tirutani, at the	50th	,,
Nagari, at the	59th	,,
Púttúr, at the	69th	,,
Púdi, at the	78th	,,
Tirupati, at the	83rd	,,

Bangalore Branch—

Kuppam, at the .. .. 154th Mile.

South Indian Railway—

Pallúr, at the .. .. 9th „

The line was first opened in the district in 1856, the various portions being completed as below :—

Madras to Arcot	on	1st July	1856.
Do. to Vellore	on	7th May	1857.
Do. to Gudiyátham	on	10th May	1858.
Do. to Ambúr	on	16th January	1860.
Do. to Nagari	on	4th March	1861.
Do. to Puttúr	on	8th December	1861.
Do. to Tirupati	on	15th September	1862.

The South Indian Railway between Arkónam and Conjeeveram was opened to the public on 8th May 1865. The gauge was at that time 3 feet 6 inches, and the line called the Carnatic Railway. In 1874 it was amalgamated with the South Indian Railway, and on July 15th, 1878, the gauge altered to 3 feet 3⅜ inches, to be conformable with the rest of the Company's line. It is proposed eventually to continue it to Chingleput, where it will unite with that running south from Madras. This will doubtless increase the traffic very considerably. The average number of passengers and amount of goods yearly carried between 1871 and 1875 was passengers 92,797, and goods 4,425 tons. But a single train runs each way daily.

The appended statement shows the number of passengers and tons of goods booked at the various stations in a series of years by the Madras Railway :—

Stations.	1871.		1872.		1873.		1874.		1875.	
	Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.
	NO.	TONS.	NO.	TONS.	NO.	TONS.	NO.	TONS.	NO.	TONS.
Chinnamapet..	12,199	1,056	10,404	1,295	10,469	1,152	12,780	1,489	11,285	1,113
Arkonam ...	114,884	2,768	116,855	3,978	126,690	3,539	118,304	2,828	138,047	3,351
Sholinghur ...	14,645	3,101	16,967	5,472	20,471	6,311	20,684	6,092	22,651	4,470
Arcot ...	66,228	17,790	71,157	17,370	81,301	15,004	77,583	13,169	77,573	14,275
Tiruvallam ...	7,824	383	5,272	706	11,660	882	12,116	752	13,284	569
Vellore ...	89,039	34,397	96,803	44,750	106,460	48,619	106,317	31,392	100,926	45,176
Virinjipuram ...	5,819	...	7,000	...	8,132	..	8,193	..	9,807	172
Gudiyatam ...	35,380	5,577	40,555	8,010	46,627	6,587	45,303	5,906	44,788	7,582
Melpatti ...	8,990	1,640	11,899	2,999	14,361	1,037	15,096	1,045	13,990	1,387
Ambur ...	25,209	2,696	28,867	3,808	32,371	3,055	31,062	5,487	31,061	4,488
Kuppum ..	8,070	1,233	9,279	3,789	11,143	3,352	11,276	4,089	11,847	4,215
Tirutani ..	41,079	2,982	48,532	3,575	51,490	3,734	48,651	3,172	52,959	2,771
Nagari ...	12,513	1,692	14,852	2,126	16,702	2,440	17,519	1,985	19,384	1,893
Puttur ...	18,135	7,233	22,539	7,931	27,426	8,905	27,931	6,519	30,038	3,151
Pudi ...	11,131	1,413	12,728	2,531	14,848	2,136	15,545	1,283	16,005	2,115
Tirupati ...	53,346	5,084	61,878	6,778	69,808	7,096	66,553	4,[illegible]	57,095	5,618
Total ...	524,692	91,035	580,647	115,212	649,978	113,759	634,913	90,127	650,829	105,245

MISSIONS.

Arcot Mission of the Reformed Church in America.—This is the most extensive and successful Protestant Mission in this district, as well as the earliest, having been begun in 1851. Prior to that year a little work had been done by the S. P. G., which had small churches in Chittoor and Vellore. At the former place Mr. Norris Groves, a Plymouth Brother, also had a small Mission. In 1855 the S. P. G. and Mr. Groves handed over their converts to the American Missionaries and deserted the field.

The American Mission is often called the Scudder Mission, since it was for some years conducted by a band of brothers bearing that name. They were the sons of the Rev. John Scudder, an American physician, who gave up a practice in New York, in order to take up mission work in Ceylon. From Ceylon he removed to Madras, where his remains are interred, though he died at the Cape. His son, the Rev. H. M. Scudder, at first laboured in Madras, but in 1851 left that city, and chose the North Arcot District as a less occupied field. He began by establishing a dispensary in the town of Wálájápet, and in the next year was joined by two of his brothers, the Revs. William and Joseph Scudder. At this time[1] "the entire spiritual property of the Mission consisted of no more than a church of eight communicants, and a small but interesting school for the children of church members." By the close of 1854 three stations, Chittoor, Vellore, and Arni, had been chosen as the centres of operation of the three brothers, with an out-station at Ránipett. In Chittoor and Vellore churches were organised, four vernacular schools were started, and a præparandi class, of thirteen selected native youths, had been formed in Vellore. In 1855 two other brothers, the Revs. Ezekiel and Jared Scudder, with a sister, joined the Mission, thus doubling its strength, and signs of marked success were visible. The number of Native Christians had increased to 350 and of communicants to 76, two new schools had been opened, and a church organised at Arni. Part of this increase was due to the accessions from the S. P. G. and Mr. Groves' Missions.

In 1856 a branch was established at Coonoor, owing to the ill-health of the Rev. Joseph Scudder, who was stationed there, the only other alternative being a return to America. This branch is still maintained by the Mission. In 1857 the Chittoor Church was built, after the departure to America of the Rev. William Scudder, in 1855, and the Rev. H. M. Scudder in the following year. The latter returned in the early part of 1859, with a new missionary, the Rev. J. Mayon, which led to the occupation of a new station, Palmanér. In this year

[1] The information regarding this mission has been obtained from a report published in 1879 by the Rev. Jared Scudder.

the Arni church was completed, and the first Native Pastor, the Rev. Andrew Sawyer, ordained at Chittoor to be in charge of the Arcot church. Towards the close of the year two of the brothers, the Revs. Joseph and Jared Scudder, returned to America, leaving Coonoor and Vellore vacant; the former never returned to India, but in 1860 the Revs. Silas Scudder and J. Chamberlain arrived, and shortly afterwards began, what the Mission calls the village movement or Rapid Development Period. Up to this year the increase in the number of converts had been chiefly by individual conversions. Now 53 Roman Catholic converts in a village called Sattambády joined the American church, and several families near Gingee desired to do so. A catechist was appointed to the new Christian community, and ere long other families joined the congregation. "Adherents were gained in three villages in 1863, in three more in 1864, in eight in 1866, in three in 1867, in thirteen in 1868, in three in 1869, in four in 1870, in four in 1871, in thirteen in 1872, in two in 1873, and in thirty-two in 1877 and 1878. In this village movement, which has continued with occasional intermission down to the present time, Christianity gained a foothold in no less than 88 different localities, and the number of Christian adherents increased from 612 to 6,083."

The præparandi class, originally started in 1854, was subsequently termed the Arcot Seminary. Its object was to secure a serviceable corps of native helpers. The most promising Christian youths were taken in as boarders, and educated for six years in general subjects and theology. The largest number of inmates was 52 in 1869, since which year the number has fallen, and is now only 33. At Chittoor is a companion institution, styled the Female Seminary, started in 1855, with three orphans taken into the Missionary's house as boarders. By 1860 the numbers had risen to 4, and the Female Seminary became one of the permanently established institutions of the Mission, superintended by the Missionary lady resident at Chittoor. Its object is "to qualify the pupils to perform in an efficient way duties of the station in life in which as wives of the native helpers, or teachers in primary schools the most of them are expected to occupy." The number of inmates of the Female Seminary has risen to fifty-five, but now fluctuates between forty and fifty.

In 1870 the Misses Mandeville and Chapin joined the Mission, and after two years opened two schools designed exclusively for the daughters of the higher classes of Hindus. "A third school was opened in 1873, and an aggregate attendance of from 160 to 180 scholars secured. The Bible has been used as a text-book and religious instruction given with little or no opposition on the part of the parents."

One of the most important efforts of the Mission is in connection with the Ránipett Hospital. The dispensary opened at Wálájápet by the Rev. H. M. Scudder was soon abandoned, but the Rev. Silas D. Scudder, who arrived in India in 1860, was commissioned as a Medical Missionary. Want of funds, owing to the American war, however, delayed his

engaging in medical work until 1866. The hospital was opened at Ránipett on March 17th, 1866. There was a Government institution in charge of an East Indian Apothecary in this place at the time, and it appeared at first as though the Mission Hospital must fail for lack of patients, owing to the suspicions of the natives. Upon application to Government, however, the rival dispensary was abolished, and half the amount hitherto devoted to it was given to the Mission Establishment. Ever since, the Ránipett Dispensary has been the most successful institution of its kind in the district. The permanence of the officer in charge, and his acquaintance with the vernacular of the country, has given it a popularity which no other hospital possesses. Christianity is daily preached to the patients, tracts are distributed, and Bibles, with other larger religious books, are kept on the premises for perusal. A female Bible reader is employed in the female ward, and a prayer meeting held in the building for in-patients, attendance being voluntary. In 1871, owing to the Society being in debt, instructions were received to curtail expenditure This involved the abandonment of the dispensary, but Government resolved to save the institution, and made an additional grant of Rupees 1,500 to its funds. In 1873 it was taken over by the Local Fund Board, which bears all the expense, but contributes nothing towards the salary of the Missionary in charge. Dr. H. M. Scudder, the grandson of the Missionary who first laboured in this district, is now in charge, and has succeeded in opening another dispensary at Wálájápet, in which out-patients are treated.

The following statements exhibit the personnel of the Mission and the statistics for various years. About a third of the number of converts belong to the South Arcot District:—

Personnel of the Mission.

Names of Missionaries.	Date of joining the Mission.	Period of Labour.	Date of Retirement.
		YEARS.	
Rev. H. M. Scudder, D.D., M.D.	1853	11	1864
„ W. W. Scudder, D.D.	1853	20	1872
„ Joseph Scudder, D.D.	1853	7	1859
„ E. C. Scudder, M.A., M D.	1855	22	1875
„ J. W. Scudder, M.A., M.D.	1855	24	..
„ J. Mayon, M.A.	1859	10	1869
„ J. Chamberlain, D.D., M.D.	1860	19	..
„ S. D. Scudder, M.A., M.D.	1861	11	1872
„ John Scudder, M.A., M.D.	1861	18	..
„ E. J. Heeren, M.A.	1872	5	1877
„ J. H. Wyckoff, M.A.	1875	5	..
H. M. Scudder, Esq., Jr., M.D.	1874	5	..
Miss Martha Mandeville	1870	9	..
„ Josephine Chapin	1870	4	1874

The Rev. Messrs. H. M. and W. W. Scudder laboured in India several years before the organization of the Arcot Mission. Their entire terms of missionary labour were respectively twenty and twenty-five years.

Comparative Table showing the Relative Statistics of the Arcot Mission.

Statistics.	1854.	1860	1868.	1878.
Stations	3	6	8	9
Out-stations	1	..	31	88
Male Missionaries	3	8	8	5
Female Missionaries	3	9	8	6
Native Ministers	..	1	3	2
Catechists and Assistant Catechists	3	4	29	31
Readers and Teachers	5	7	47	64
Churches	2	6	14	21
Communicants	26	154	534	1,112
Total of Christian adherents	170	612	2,094	6,083
Arcot Seminary pupils	13	20	47	33
Female do.	..	14	46	33
Day schools	4	5	28	56
Hindu girls' schools	..	..	..	2

Church of Scotland Mission.—The efforts of this Mission are chiefly educational, and carried on only at Vellore since 1853, and at Arkónam since 1868. The following table exhibits the results at the close of the year 1879 :—

	——	Male.	Female.	Total.
Vellore.	English School (Anglo-Vernacular)	190	..	190
	Communicants	5	7	12
	Adherents (above 14 years of age) not in full communion.	2	2	4
	Children of Native Christians	9	3	12
	Adults baptized during the past 12 months	None.	None.	None.
	Infants do. do.	1	..	1
Arkónam.	English School (Anglo-Vernacular)	135	53	188
	Communicants	10	8	18
	Adherents (above 14 years of age) not in full communion.	..	..	..
	Children of Native Christians	5	7	12
	Adults baptized during past 12 months	..	..	..
	Infants do. do.	..	..	..

Danish Mission.—The Rev. Edward Löwenthal of this Mission has for the past seven years been stationed at Vellore, and for four years has preached in its streets and in the houses of the natives, but as yet without any positive results. Two other Missionaries of the same Society established themselves at Ránipet in 1877, but left within a year.

Hermansburg Evangelical Lutheran Mission.—Regarding this the Rev. J. Wörrlein, now stationed at Tirupati, writes as follows :—

"The Mission commenced its work in the Nellore District in 1866. We have now there seven stations with about 500 converts. In North Arcot we commenced work in 1873 at Kálahastri. The Mission house, a small chapel, and two houses for catechists were built in 1873. I was there till October 1877, and after my departure for Tirupati the Rev. Thomas Peterson took charge, and in January 1878 made it over to the Rev. G. Schepmann, who is still there. The chapel being too small for divine service, Mr. Schepmann built a pretty large church, which was consecrated in June 1879. We have a small school there, the old chapel being used for the purpose. The statistics relating to Kálahastri are these:—

Year.	Missionary.	Catechists.	Converts.
1873	Rev. J. Wörrlein	2	2
1874	Do.	..	2
1875	Do.	..	3
1876	Do.	..	12
1877	Revs. J. Wörrlein and T. Peterson..	..	56
1878	Rev. G. Schepmann	..	43
1879	....	..	32
	Total ..	..	150

"In 1876 we established a station at Tirupati. The Rev. P. Peterson commenced the work in October 1876. Within a year two Mission houses were built there, two houses for catechists, and a church. Connected with the school for our Christian children is a small orphanage with twelve orphans. The statistics are:—

Year.	Missionaries.	Catechists.	Converts.
1877	Rev. P. Peterson and Rev. J. Wörrlein.	2	6
1878		..	31
1879		..	34
	Total ..	..	71

Roman Catholic Missions.—That portion of the district lying north of the Pálár belongs to the Vicarate of Madras, and the rest to that of Pondicherry. The Very Rev. J. Colgan, Vicar-General of Madras, has kindly furnished the following account of the Missions north of the river:—

"With the exception of Christianpett, in the Chittoor Taluk, and Punganúr, in the zemindari of that name, all the other villages named in the appended lists are inhabited by non-caste Christians. Their origin dates, I should suppose, from the time British troops were first located at Arcot, and judicial and revenue officers took up their habitation in other parts of the district, as they were till lately for the most part camp followers, and domestic servants or their descendants. The new converts are, I believe, for the most part cultivators.

Regarding Punganúr, I find from Father Bertrand's History of the Madura Mission that Christians were there at least as far back as 1735. Father C. Calmette of the Society of Jesus, in a letter to Father Dalmos of the same Society, dated Ballapuram, Mysore Territory, 17th September 1735, makes mention of the Christians and of a Christian church then at Punganúr. Father Arnold, an ex-Jesuit Missionary, had charge of the Mission of Punganúr in 1773, and, in consequence of the persecution of the Poligars, emigrated with his Christians, who were mostly of the Balija and Vellála caste, first to Vellore and afterwards to Chellampatteda, now a large Christian village in the Conjeeveram Taluk. In the same letter he speaks of a new church which had been built seven or eight years before at Vencatagiri, the capital of the principality[1] of the same name, and was then in charge of Rev. G. Gargam, S.J. When Vencatagiri was besieged by the Moghuls the church was destroyed, but rebuilt two years afterwards. At Málapalle, near Punganúr, there are still the ruins of what appears once to have been a handsome church, having an inscription over the front door to the effect that the church was built in 1780.

"The Christians of Christianpett are of the Rázu and Balija caste. Of the Balijas some came from Punganúr and others from Patteda. The Rázus all came from Patteda and Kilachéri in the Chingleput District, and are located there for upwards of a hundred years. Some of them were in the service of the Nabob of Arcot as police, and continued as such after the English took that portion of the country. As a reward for their past services their descendants still enjoy their land at a comparatively small rent to Government. The Rázus originally came to Kilachéri from the Cuddapah District, and after their conversion emigrated to Christianpett."

Names of Taluks and Villages.	Old Christians.	Total.	New Christians.	Total.
Chittoor Taluk.				
Chittoor	163		..	
Papachetty	..		28	
Thirumallúr	..		61	
Gudipáliem	..		51	
Sittapary	..		64	
Nangamangalum	..		26	
Christnaveram	..		72	
Varigapalle	..		110	
Vennumballe	..		46	
		163		452
Gudiyátam Taluk.				
Christianpett	275		..	
Karragiri	..		10	
Woderanthángal	..		127	
Kátpádi	47		..	
Odiéndram	276		..	

[1] Yencatagirikóta in the Palmanér Taluk.

Names of Taluks and Villages.	Old Christians.	Total.	New Christians.	Total.
Gudiyátam Taluk—(Continued).				
Chengalráyen Patry	..		60	
Eckalaveram	..		14	
Canthérry	..	598	40	261
Wálájá Taluk.				
Ránipet	216		..	
Alumpákam	54		..	
Muthudu	66	336	..	..
Palmanér Taluk.				
Palmanér	51	51	..	..
Zemindari of Punganúr.				
Punganúr	88		..	
Málapally	15		..	
Civady	46	149	..	..
Grand Total ..	..	1,297	..	731

There are seven or eight Christian families in Kálahastri ; they are in the employ of the Rajah as musicians.

Regarding the Roman Catholic Mission in Vellore the Reverend F. Baulez writes:— "Towards the beginning of the seventeenth century the Nabob of Vellore, Ghulam Murturja Khán Bahadoor, conceded to a French priest an acre of land at the foot of the hill, where there was a fortress guarded by soldiers who were Catholics. A chapel was built upon this ground. The deed of the concession of land is written in the Persian language, and bears the date of the 19th of the month of Magaram, 1004 of the Mahommedan era. Subsequently the town having extended to the south, the old church became insufficient, and the Reverend J. B. Beauclair wrote to Mr. Goldingham, then Collector of the district, asking for a piece of land lying at the military cantonment. The Collector desired the Tahsildar to take the necessary steps, and two acres of an ancient tank, called Adavanthairy, were bought on the 3rd March 1845. The new church was finished in the year 1854. The Catholic population of Vellore consists of 2,000 persons, besides 88 orphans. This orphanage is under the care of five native nuns from the Convent of St. Louis of Gonzaga at Pondicherry."

"There are in Vellore about a dozen European and Eurasian families of pensioners, some Europeans and East Indians in Government employ, sixty drummers and sepoys, a good number of pensioned sepoys and families of sepoys. The rest of the community is composed of domestic servants, coolies, &c.

"Kaniembádi is about 8 miles from Vellore. One thousand Christians of the Reddy and Kavarai caste live here. These families came a hundred years ago from the Telugu country. The present church was begun on the 1st May 1844, and finished in 1845 by the Reverend J. B. Beauclair. The people are mostly cultivators.

"Adakampárai is four miles from Vellore, and contains about 700 Christians. All are cultivators from the Telugu country.

"Arcot has fifteen families belonging to the Mission of Pondicherry. There is a small chapel at Vandipaleyam.

"The number of converts appears below :—

Vellore.	Old church	800
	New church	1,200
	Orphanage	88
Kaniembády		1,000
Adákampárai		700
Arcot		70
	Total ..	3,858 "

The Rev. H. M. Darras, who is in charge of the Mission in the extreme south of the district, is unable to give any information regarding the history of the Mission there, but states that the Roman Catholic population is—

In the Pólúr Taluk	4,265 in 50	villages.
Do. Wandiwash	1,946 in 34	do.
Do. Arni Jaghire	355 in 4	do.
Total ..	6,566 in 88	do.

The total number of Christians in North Arcot, therefore, appears to be nearly 17,000, of whom three-quarters are Roman Catholics.

WEIGHTS AND MEASURES.

The following memorandum was drawn up in 1856 by Mr. W. H. Bayley from reports made by the Collector of this district :—

"*Land Measure.*—The *káni* was adopted in measuring the lands for assessment in about 1803.

1 kóle or rod = 24 feet.
1 square kóle = 576 feet = 1 kuli (Tamil) or gunta (Telugu).
100 kulis or guntas = 1 káni = 57,600 square feet = acre 1·322314.

"In the revenue accounts the *káni* is divided into annas, or sixteenths, and these into pies, or twelfths of an anna.

1 anna = 3,600 square feet.
1 pie = 300 do.

"The *gurru* of 40 *guntas*[1], each *gunta* being a rope or chain of 72 country feet, is used in the Kálahastri Zemindari, but this length is not always adhered to. Assuming 72 country feet to be 61½ English, the *gurru* would be 3¼ acres. In the Nellore District, on which Kálahastri borders, the *gurru* or *gurtu* is 3⅛ acres.

"The *gunta* of the Kárvétnagar Zemindari is a square chain of sixty country feet[2] in unirrigated land, and 56 country feet in irrigated. Assuming the country foot at 10·2857 inches, as in Chingleput, the former *gunta* would be ·0607 acre and the latter ·053 acre.

"In the Kangundi Páliem the land measure is the extent which a certain quantity of seed will sow, but this is a mere estimate. It is said that an acre of irrigated land, requiring 7½ Madras measures to sow it, is a *káni*; and an acre of unirrigated land, requiring 36 Madras measures to sow it, is also a *káni*; the areas being supposed to be the same. The Madras measure referred to is probably the customary measure (padi) of the Madras bazaar, having a *struck* capacity of 105 cubic inches, and holding, when struck, about 117 tolas' weight of rice, and when heaped about 128.

"*Weights*—

1 pallam	= 3 tolas	=	1¼ oz.	
1 katcha seer	= 24 ,,	=	10 do.	
40 pallams	= 1 viss	=	120	tolas = 3·0875 lbs.
8 viss	= 1 maund	=	960 do.	
10 katcha seers	= 1 dhadáyam	=	240 do.	
20 maunds	= 1 kandy	=	19,200 do.	

"The *pucka* seer of Chittoor and Vellore is 72 tolas. The *pallam* of goldsmiths is said to be 10 pagodas' weight, and actually weighs about 2·8 or 2·9 tolas. The viss is sometimes estimated at 400 Ikairee pagodás, sometimes 400 Bahadry, or 400 star pagodas. The average of these is 52·7 grains to the pagoda, which would make the viss 117 tolas; but on trial it is found to be from 119 to 121 tolas, so that 120 tolas, as in the table above, may be assumed, though a viss of 126 tolas is also in use in Arcot, Chittoor, and Vellore.

"In the return to the circular of 1871, 8 pallams are said to be a *katcha* seer of 24 rupees' weight.

"*Grain Measures.*—When this district was assessed for land revenue about 1805, the usual grain measure for *account* was the "*kallam*," which was then said to be about 40 Madras measures. The Madras measure referred to was said to contain 120 tolas' weight of *gram*, but whether struck, or heaped, is not mentioned; probably the latter.

"In reply to the circular of 1821, it was stated that the *kallam* was generally estimated at 30 Madras *padis* and sub-divided into 12 *tooms*. The *padi* transmitted as a model at that time had a capacity of 108 cubic inches, and held 126 tolas of horse-gram when struck, and 140 when heaped, but

---

[1] 10 guntas = 1 Kálahastri káni.
4 kánis = 1 gurru.

[2] The Kárvétnagar foot is fixed by the length of the goddess' foot in the temple of Kempulapáliem, near Náráyanavanam, and is roughly 10¼ inches.

from reference to the original taluk reports from the Tahsildars to the Collector it appears that there was no definite standard for the *padi*. In Chittoor it is reported as 120 rupees' weight; in Vellore 140; and in other places from 128 to 136, but whether heaped or struck is not stated; most probably the weight of the heaped measure, in *gram*, which grain seems to be used in North Arcot as a standard.

"In 1838 the Collector endeavoured to introduce a uniform *padi*, to contain, when heaped, 150 tolas' weight of horse-gram, and though variety certainly exists, this standard certainly agrees with the *padi* of four principal towns as gauged in the Madras Mint in 1852 as follows:—

Diameter in Inches.	Depth in Inches.	Cubic Inches.	Horse-gram struck in Tolas.	Horse-gram heaped in Tolas.
$4\frac{1}{4}$	8·66	122	142	150

"When tested with rice they held 138 tolas struck and *nearly* 150 heaped, for though rice has a less specific gravity than horse-gram (113 instead of 116 tolas to 100 cubic inches) horse-gram being a rounder grain does not heap so high.

"The table of measures is the same as in Chingleput, viz.:—

8 padis = 1 marakál or toom.
12 marakáls = 1 kallam.
400 marakáls = 1 garce.

"The present *toom* or marakál differs in different places as follows:—

At Shólinghur, Pólúr, and Arni it is $2\frac{1}{2}$ padis heaped.
,, Tiruvettúr $2\frac{2}{3}$ do.
,, Wandiwash $2\frac{5}{8}$ do.
,, Tiruvalam and Chittoor 3 do.
,, Vellore 4 do.
,, Venkatagirikóta and Tirupati 8 do.

12 tooms or marakáls = 1 kallam.
40 kallams = 1 kandy.

"*The Ráyoji Marakál* varies from $2\frac{1}{2}$ to $2\frac{3}{4}$ *padis*, but holds, on an average, 400 rupees' weight of horse-gram, which agrees with the *Ráyoji Marakál* of South Arcot. In the old returns, however, it is stated that it varies from 350 to 360 rupees' weight, so that perhaps $2\frac{1}{2}$ *padis* is nearer the truth.

"In preparing price lists the Madras *garce* is estimated at 3,200 heaped *padis*, which in North Arcot would be equivalent to about 6,000 pucka seers." [1]

Milk is sold by the *padi* and its submultiples, called ollocks, eight ollocks going to a *padi*. Dimensions and length are now generally expressed in terms of the English measures, inches, feet, and yards, but

[1] There are also various local measures used in particular parts. Thus in Kálahastri—
1 padi = 4 savva seers = 1 munta.
10 muntas = 1 irusa.
2 irusas = 1 Kálahastri toom = $4\frac{3}{4}$ Madras tooms.

finger's breadth, spans, and cubits are also spoken of; thus—

12 fingers' breadth	= 1 span (ján).
2 spans	= 1 cubit (múra).
2 cubits	= 1 yard (gejam).
4 cubits	= 1 fathom (bár).

The English mile is also used in describing long distances, as well as the old native measures which are—

Distance walked in a náligó (Tamil) or gadia (Telugu) = $1\frac{1}{2}$ mile.
$2\frac{1}{2}$ náligós or gadias = 1 paragu.
3 paragus = 1 ámada or kádam = 10 miles.

For time the English style is common. The native table is the following:—

6	vikkadaleis or vinádies		= 1 nimisham or wink.
60	do.	do.	= 1 viggadia.
60	viggadias		= 1 náligé or gadia.
$3\frac{3}{4}$	gadias		= 1 múrtam.
60	gadias		= 1 day.

The gadia or náligé is therefore of 24 minutes' duration.

Twenty-seven kártis make up one year, the length of which varies in different years from less than 360 to 367 days, the ordinary duration of a karti being $13\frac{3}{4}$ days. There are twelve months in each year, varying in length up to as much as 32 days. The whole arrangement is very complicated and would take long to describe, depending as it does upon the movements of the heavenly bodies.

APPENDIX.

APPENDIX.

No. 1.—*Statement showing the Number of Villages and Hamlets in the District of North Arcot as they stood in Fasli* 1286.

Taluks.	Area in Square Miles.	Government.				Zemindari.				Inam.				Total.					
		Inhabited.		Uninhabited.		Inhabited.		Uninhabited.		Inhabited.		Uninhabited.		Inhabited.		Uninhabited.		Total.	
		Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.	Number of Villages.	Number of Hamlets.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Chittoor	785	409	387	57	23	186	113	25	17	16	25	5	..	611	525	87	40	698	565
Chandragiri	548	166	135	29	2	150	102	22	41	32	21	4	..	348	258	55	43	403	301
Palmanér	438	356	66	175	26	..	..	..	..	22	..	11	..	378	66	186	26	564	92
Gudiyátam	446	245	226	25	1	..	..	..	..	3	1	..	..	248	227	25	1	273	228
Vellore	455	169	157	19	4	..	..	..	..	2	3	..	..	171	160	19	4	190	164
Pólúr	443	191	66	40	8	..	..	..	..	1	..	..	..	192	66	40	8	232	74
Wandiwash	466	377	37	43	2	..	..	..	..	4	..	..	..	381	37	43	2	424	39
Arcot	432	293	60	56	..	..	..	..	..	7	4	..	..	300	64	56	..	356	64
Wálájá	483	268	249	34	19	4	5	..	..	15	15	..	..	287	269	34	19	321	288
Kálahastri	874	..	..	..	..	452	190	22	..	..	..	..	..	452	190	22	..	474	190
Kárvétnagar	943	..	..	..	..	650	397	142	13	..	..	..	..	650	397	142	13	792	410
Punganúr	523	..	..	..	..	69	574	..	131	..	..	..	..	69	574	..	131	69	705
Kangundi	342	..	..	..	..	272	74	47	17	..	..	..	..	272	74	47	17	319	91
Arni	183	..	..	..	..	147	35	43	..	..	..	..	..	147	35	43	..	190	35
Total ..	7,361	2,474	1,383	478	85	1,930	1,490	301	219	102	69	20	..	4,506	2,942	799	304	5,305	3,246

The figures in columns 7 to 10 represent the number of villages and hamlets in the zemindaries, páliems, mutahs, and jaghires.

No. 2.—*Statement of Rent Roll for Fasli* 1286 (*last Quinquennial Fasli Year*).

Puttah.	Single Puttahs.					
	Number.	Assessment.	Number.	Assessment.	Number.	Assessment.
		Rs.		Rs.		Rs.
Below 10 Rs.	97,058	2,30,902	58,948	1,14,361	156,006	3,45,263
Above 10 Rs. but below 30 Rs.	18,037	2,25,036	13,574	2,04,763	31,611	4,29,799
Do. 30 ,, do. 50 ,,	3,018	1,01,953	2,711	87,013	5,729	1,88,966
Do. 50 ,, do. 100 ,,	1,219	72,201	1,335	82,199	2,554	1,54,400
Do. 100 ,, do. 250 ,,	219	28,286	280	35,955	499	64,241
Do. 250 ,, do. 500 ,,	8	2,729	12	5,513	20	8,242
Do. 500 ,, do. 1,000 ,,	3	1,950	2	1,072	5	3,022
Total ..	119,562	6,63,057	76,862	5,30,876	196,424	11,93,933

No. 3.—*Statement showing the Prices of Grain for a series of Ten Years in the District of North Arcot from* 1869 *to* 1878.

Faslis.	Official Years.	Rice, 1st Sort, per Garce.	Rice, 2nd Sort, per Garce.	Paddy, 1st Sort, per Garce.	Paddy, 2nd Sort, per Garce.	Cholum per Garce.	Kambu per Garce.	Rági per Garce.	Varagu per Garce.	Horse Gram per Garce.	Ulandu per Garce.	Wheat per Garce.	Salt per Garce.
1278	1868-69	421	385	193	180	226	203	211	128	225	..	..	..
1279	1869-70	381	350	167	154	196	175	166	126	194	..	..	..
1280	1870-71	276	249	120	108	130	125	126	101	154	..	..	..
1281	1871-72	252	234	103	96	136	123	111	86	182	..	..	..
1282	1872-73	271	245	113	104	152	138	122	136	221	..	..	..
1283	1873-74	321	299	140	131	190	182	167	145	253	..	..	..
1284	1874-75	324	293	136	126	168	169	170	140	276	..	..	..
1285	1875-76	355	327	161	150	239	211	247	177	243	..	..	..
1286	1876-77	605	525	294	275	421	415	403	266	431	..	..	..
1287	1877-78	640	609	312	291	512	427	441	178	533	533	753	400

No. 4.—*Statement showing the Particulars of Cultivation, &c., for a series of Ten Years* 1869 *to* 1878 (*Faslis* 1278 *to* 1287).

Faslis.	Area occupied.				Charge for Water.	Total Assessment.	Deduct Remissions.	Remainder.	Add Miscellaneous Items.
	Dry.		Wet.						
	Extent.	Assessment.	Extent.	Assessment.					
1	2	3	4	5	6	7	8	9	10
	ACRES.	RS.	ACRES.	RS.	RS.	RS.	RS.	RS.	RS.
1278 ...	449,122	6,28,523	207,727	11,94,425	62,739	18,85,687	4,80,718	14,04,969	1,37,055
1279 ...	471,106	6,55,840	209,706	12,03,464	69,318	19,28,631	2,87,205	16,41,426	1,66,413
1280 ...	503,521	6,92,913	205,927	11,74,309	1,07,586	19,74,808	1,15,750	18,59,058	1,50,713
1281 ...	490,586	6,74,990	205,747	11,73,394	1,21,929	19,70,322	1,15,329	18,54,993	1,27,939
1282 ...	462,097	6,38,927	204,029	11,63,308	1,76,089	19,78,324	1,29,804	18,48,520	1,67,616
1283 ...	438,325	6,08,154	203,920	11,61,984	1,31,452	19,01,590	2,09,286	16,92,304	1,51,505
1284 ...	454,175	6,29,992	205,298	11,68,513	2,23,518	20,22,023	1,17,666	19,04,357	1,73,106
1285 ...	446,776	6,19,835	206,140	11,73,131	99,951	18,92,917	2,69,318	16,23,599	1,27,540
1286 ...	443,899	6,16,465	206,060	11,73,008	40,686	18,30,159	6,36,229	11,93,930	1,15,126
1287 ...	445,676	6,19,167	206,448	11,75,018	1,04,464	18,98,649	2,10,626	16,88,023	1,31,192

Faslis.	Total Ryotwari Demand.	Revenue from Permanently Settled Estates.	Jodi on Shrotrium Villages.	Total Land Revenue Demand.	Arrears previous Years.	Total Demand of the Year.	Gross Collections.	Balance at the end of Fasli.
	11	12	13	14	15	16	17	18
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
1278 ...	15,42,024	5,09,844	23,408	20,75,276	9,51,978	30,27,254	18,94,642 20,339	11,03,273
1279 ...	18,07,839	5,04,954	23,721	23,36,514	11,03,273	34,39,787	21,90,821 48,628	12,00,338
1280 ...	20,00,771	5,05,031	23,837	25,38,639	12,00,338	37,38,977	27,28,300 21,808	9,88,869
1281 ...	19,82,932	5,01,036	23,790	25,07,758	9,88,868[1]	34,96,626	28,80,413 26,777	5,89,436
1282 ...	20,16,136	4,88,036	23,770	25,27,942	5,89,436	31,17,378	25,18,602	5,98,776
1283 ...	18,43,809	4,87,790	23,995	23,55,594	5,98,412[2]	29,54,006	24,40,397 22,137	4,91,472
1284 ...	20,77,463	4,87,597	24,001	25,89,061	4,91,105[3]	30,80,166	26,73,027 14,307	3,92,832
1285 ...	17,51,139	4,86,737	23,822	22,61,698	4,22,865[4]	26,84,563	22,27,048 25,487	4,32,028
1286 ...	13,00,056	4,86,724	23,751	18,19,531	4,32,028	22,51,559	7,15,643 10,939	15,15,977
1287 ...	18,19,215	4,86,724	23,751	23,29,690	15,15,977	38,45,667	20,63,159 44,450	17,38,058

[1] The decrease of Rupee 1 in bringing forward the arrears of the previous fasli in column 18 is the result of exhibiting figures in a round sum.

[2] The decrease of Rupees 361 in bringing forward the arrears of the previous fasli in column 18 is not traceable from the Settlement Report or other records.

[3] The decrease of Rupees 367 in bringing forward the arrears of the previous fasli in column 18 is owing to the erroneous inclusion in the demand of Fasli 1283 of the arrear of a certain village transferred to Salem where the arrear had been taken into account.

[4] For the increase of Rupees 30,033 in bringing forward the arrears of the previous fasli in column 18 see Board's Proceedings, dated 13th and 17th October 1876, Miscellaneous Nos. 8,767 and 8,996 respectively.

No. 5.—*Statement showing the Particulars of the several Zemindaris other than Ryotwar.*

Names of Zemindaris and Inam Villages.	The Entire Beriz of the Estate.	Péshcush or Quit-rent.	
Zemindaris, &c.		Peshcush.	Quit-Rent. (Additional quit-rent on Kattubadi Inams).
	Rs.	Rs.	Rs.
Kálahastri	3,93,402	1,76,790	..
Kárvétnagar	8,20,671	1,80,494	..
Kangundi	72,464	22,959	..
Punganúr	2,37,394	66,859	6,823
Arigalavádi Mitta	5,856	2,016	..
Arni Jaghire	2,13,728	5,099	..
Gudipáti Páliem	13,974	2,849	1,020
Náraganti Páliem	34,444	6,554	638
Bungári Páliem	58,854	11,644	1,006
Tumba Páliem	4,141	1,783	120
Pulicherla Páliem	30,664	5,580	383
Kallúr Páliem	17,888	4,097	622
	19,03,480	4,86,724	10,612

No. 6.—*Statement showing the Collections under the several heads of Revenue in the District of North Arcot for a series of Ten Years from* 1869 *to* 1878.

Fasli.	Official Years.	Land Revenue.			Forest Revenue.	Abkari.	Income-tax.	Sea Customs.	Land Customs.	Salt.	Stamps.	Grand Total.
		Peshcush.	Ryotwar, &c.	Total.								
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1278.	1868-69 ...	5,58,962	13,42,193	19,01,155	10,578	2,73,053	15,344	...	...	...	1,36,716	23,37,746
1279.	1869-70 ...	5,35,246	16,56,022	21,91,268	8,443	3,43,447	51,950	...	...	...	1,40,581	27,35,689
1280.	1870-71 ...	5,12,052	22,18,705	27,30,757	15,347	2,82,883	89,632	...	...	...	65,462	31,84,081
1281.	1871-72 ...	4,88,441	23,93,063	28,81,504	21,405	3,30,394	27,707	...	...	...	1,43,302	34,04,312
1282.	1872-73 ...	5,20,427	19,98,173	25,18,600	14,685	2,91,141	17,287	...	...	...	1,63,437	30,05,150
1283.	1873-74 ...	5,28,099	19,12,461	24,40,560	10,555	3,04,037	402	...	...	...	1,92,432	29,57,076
1284.	1874-75 ...	4,35,603	22,38,408	26,74,011	17,257	2,86,903	25	...	...	...	1,88,443	31,66,639
1285.	1875-76 ...	4,79,130	17,48,191	22,27,321	17,566	4,02,202	..	...	..	..	1,98,500	28,45,589
1286.	1876-77 ...	1,36,052	5,79,780	7,15,832	22,120	2,88,018	...	...	..	..	1,87,287	12,13,857
1287.	1877-78 ...	4,75,552	15,87,573	20,63,125	15,003	2,14,459	..	..	..	...	1,73,288	24,65,965

No. 7.—*Statement of Exports and Imports by Railway in North Arcot during the Year* 1875 *in Maunds of* 82 *lb. each.*

—	Madras and Púdi.		Madras and Tirupati.		Madras and Sholinghur.		Madras and Arcot.		Madras and Tiruvallam.		Madras and Vellore.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.
Cloth	17	..	163	192	86	..	636	474	27	..	2,863	10
Coffee	..	..	..	..	..	..	..	..	..	..	..	26
Cotton	..	..	6	..	..	..	..	..	..	..	..	..
Grain	..	7	..	..	..	..	..	68	..	..	138	200
Gram	..	315	529	317	311	56	326	938	..	..	1,927	4,701
Iron	124	..	2,131	133	577	146	1,038	..	97	104	4,628	..
Jaggery	..	174	9	957	..	311	6,103	3,470	..	..	156	33,872
Paddy	..	4,492	..	3,223	..	15	..	..	..	82	..	..
Rági	..	1,667	..	1,394	..	650	..	49	..	..	..	..
Rice	..	1,340	11	3,605	87	88,302	90	58,361	..	2,760	20	23,962
Salt	1,839	..	4,509	..	4,728	..	77,712	..	5,534	..	165,711	..
Sundries	2,367	29,994	6,021	77,623	3,002	28,002	14,263	84,953	923	4,013	51,720	84,056
Timber	271	9,484	804	6,799	344	..	39	..	..	..	1,580	..
Twist	209	..	114	..	1,111	..	742	15	116	8	1,142	..
Railway materials..	..	..	11	..	..	..	..	..	19	..	79	..
Total ..	4,827	47,473	14,308	94,243	10,246	117,482	100,949	148,328	6,716	6,967	229,964	146,827

The exports of the other stations in the district are not shown separately in the Railway accounts.

No. 7.—*Statement of Exports and Imports by Railway in North Arcot during the Year* 1875 *in Maunds of* 82 *lb. each*—(Continued).

—	Arcot and Bangalore.		Arcot and Beypore.		Vellore and Bangalore.		Vellore and Beypore.		Gudiyáttum and Beypore.		Total.	
	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.
	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.	MAUNDS.
Cloth	262	6	..	..	379	..	..	..	..	..	1,317	3,798
Coffee	..	..	..	..	11	15	..	100	564	..	601	115
Cotton	..	..	..	6	..	..	..	..	..	..	..	12
Grain	24	224	..	..	..	71	..	36	..	..	299	471
Gram	20	148	..	..	631	457	..	24	22	..	7,000	3,722
Iron	19	..	..	..	14	..	..	..	..	..	416	8,595
Jaggery	..	..	306	..	2,666	..	52,517	132	15,265	..	109,538	6,400
Paddy	..	..	..	..	71	..	3,641	21	1,106	..	12,630	21
Rági	261	942	..	128	877	3,176	379	..	..	..	5,277	4,246
Rice	6,207	24	143,251	51	23,505	61	448,982	871	47,218	90	847,493	1,305
Salt	..	..	..	..	..	..	..	..	..	..	..	260,033
Sundries	2,450	17,498	20,884	2,760	4,829	18,507	40,527	9,262	5,169	849	382,500	127,172
Timber	..	..	..	..	..	..	..	..	..	..	16,283	3,038
Twist	..	49	..	..	5	100	..	..	6	..	34	3,583
Railway materials.	..	..	..	..	..	..	..	..	..	..	..	109
Total ..	9,243	18,891	164,441	2,945	32,988	22,387	546,046	10,448	69,350	939	1,383,388	422,620

The exports of the other stations in the district are not shown separately in the Railway accounts.

No. 8.—*Statement showing the Value of Suits disposed of in the Civil and Revenue Courts of the District of North Arcot in the Year* 1876.

Value.	Number of Suits disposed of in different Courts.													
	Ordinary Suits.								Small Causes.					
	Village Munsifs.	Revenue Courts.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts as Subordinate Judges.	Civil Judges, Agents, and Judicial Commissioner.	Total Number of Suits.	Total Value in Rupees.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts.	Civil Judges, Agents, and Judicial Commissioner.	Total Number of Small Causes.	Total Value in Rupees.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Not exceeding Rs. 5 ..	1,522	7	28	..	..	..	1,557	3,831	187	..	56	..	243	823
Do. do. 20 ..	1,826	74	280	..	..	..	2,180	20,032	1,166	..	226	..	1,392	18,111
Do. do. 100 ..	71	48	1,265	..	..	..	1,384	78,102	1,865	..	898	..	2,763	1,25,547
Do. do. 500 ..	..	9	584	..	..	2	595	1,19,679	..	..	748	..	748	1,44,142
Do. do. 1,000 ..	..	..	131	..	..	..	131	86,009	..	..	..	..	..	..
Do. do. 2,500 ..	..	1	61	..	..	1	63	98,953	..	..	..	..	..	..
Do. do. 5,000 ..	..	..	..	..	..	13	13	46,866	..	..	..	..	..	..
Do. do. 10,000 ..	..	..	..	..	..	6	6	35,843	..	..	..	..	..	..
Do. do. 1,00,000 ..	..	..	..	..	..	2	2	37,345	..	..	..	..	..	..
Exceeding do. 1,00,000 ..	..	..	..	..	.	1	1	4,00,000	..	..	..	..	..	..
Suits of which it is not possible to estimate the money value .	..	110	3	..	..	..	113	..	..	..	..	..	..	..
Total ..	3,419	249	2,352	..	..	25	6,045	9,26,660	3,218	..	1,928	..	5,146	2,88,623

No. 9.—*Statement showing the Number and Nature of Civil Suits instituted in the several Classes of Courts in the District of North Arcot in the Year* 1876.

Nature of Claims.	Number of Cases in different Courts.											
	Ordinary Suits.							Small Causes.				
	Village Munsifs.	Revenue Courts.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts as Subordinate Judges.	District Judges, Agents, and Judicial Commissioner.	Total.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts.	District Judges, Agents, and Judicial Commissioner.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
Civil Court Cases.												
Money due on Contract. On written promise for sum certain.	601	...	91	...	...	6	788	2,021	...	940	...	2,370
Money due on Contract. On unwritten promise for sum certain.	628	...	9	...	...	...	637	231	...	139	...	370
Money due on Contract. On account stated ...	1,333	...	8	...	...	...	1,341	307	...	56	...	363
Money due on Contract. Money paid or received.	206	...	1	...	...	...	207	74	...	8	...	82
Money due on Contract. For goods sold and delivered.	137	..	2	...	...	...	139	69	...	...	...	69
Rent	115	...	10	...	...	...	125	140	...	18	...	158
Recovery of personal property or value thereof.	220	...	4	...	...	...	224	178	...	9	...	187
Damages. For injuries to person ...	...	...	...	...	...	...	...	...	...	...	...	...
Damages. For do. to property.	...	...	1	...	...	...	1	10	...	1	...	11
Damages. For defamation	...	..	22	...	...	...	22	...	...	...	...	...
Damages. For other injuries not included in the above.	...	...	4	..	...	...	4	1	...	...	...	1
Damages. For breaches of contract not included in the above.	...	...	5	...	..	...	5	...	...	...	...	...
Suits to compel specific performance of contracts.	...	...	18	...	...	1	10	2	...	...	...	2
Suits to set aside contracts and obligations on account of fraud, mistake, or accident.	...	...	...	...	...	...	...	...	...	...	...	...
Suits to compel or prevent particular acts by way of mandamus or injunction.	..	....	5	...	...	...	5	...	...	...	...	....
Suits to settle partnership and other accounts.	...	...	4	...	...	5	9	...	...	...	...	...
Admiralty and other suits relating to shipping.	...	...	...	...	...	...	...	...	...	...	...	...
Suits connected with religion and caste.	...	...	1	...	...	...	1	...	...	...	...	...
Suits relating to administration of trusts and religious endowments.	...	...	2	...	...	...	2	...	...	...	...	...
Suits relating to marriage dower and divorce.	...	...	12	...	...	...	12	...	...	...	...	...
Suits to establish or dispute adoption.	...	...	1	...	...	...	1	...	...	...	...	...
Suits regarding custody and guardianship of infants and lunatics.	...	...	...	...	...	...	...	...	...	...	...	...
Other suits to declare or establish personal rights.	...	...	82	...	...	4	86	...	...	...	...	...
Suits to establish or contest wills.	...	...	...	...	...	...	...	...	...	...	...	...
Claims to Inheritance. Under Hindu Law ...	...	...	15	...	...	...	15	...	...	...	...	...
Claims to Inheritance. Do. Mahomedan Law.	...	...	3	...	...	...	3	...	...	...	...	...
Claims to Inheritance. Do. any other Law ...	...	...	...	...	...	...	...	...	...	...	...	...
Suits to establish or contest the acts of Hindu widows.	..	.	3	..	...	...	3	...	...	...	...	...
Suits relating to the revenue.	...	..	1	..	...	...	1	...	...	7	...	7
Do. do. to mortgage of immoveable property.	...	...	1,222	...	...	5	1,227	...	...	....	...	...

No. 9.—*Statement showing the Number and Nature of Civil Suits instituted in the several Classes of Courts in the District of North Arcot in the Year* 1876 —(Continued).

Nature of Claims.	Number of Cases in different Courts.											
	Ordinary Suits.							Small Causes.				
	Village Munsifs.	Revenue Courts.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts as Subordinate Judges.	District Judges, Agents, and Judicial Commissioner.	Total.	District Munsifs, Assistant Agents, and Assistant Commissioner.	Subordinate Judges.	Judges of Small Cause Courts.	District Judges, Agents, and Judicial Commissioner.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
Civil Court Cases— (Continued).												
Claims in right of pre-emption.	...	...	...	...	...	...	...	...	...	...	...	...
Suits to resume or assess rent-free lands.	...	...	7	...	...	...	7	...	...	...	...	...
Suits regarding the relative rights of superior and inferior holders of lands (other than rent suits).	...	...	5	...	...	...	5	...	...	...	...	...
Suits for partition of immoveable property.	...	...	20	...	...	4	33	...	...	...	...	...
Suits regarding boundaries...	...	...	1	...	...	...	1	...	...	...	...	...
Suits for, or relating to, real property not included in the above.	...	...	326	...	...	3	329	...	...	...	...	...
Revenue Court Cases.												
Claims connected with boundary and cultivation disputes (Regulation XII of 1816, Section 4).	...	...	...	...	...	...	...	...	...	...	...	...
Claims to hereditary offices or their emoluments (Regulation VI of 1831, Section 3).	...	120	...	...	...	...	120	...	...	...	...	...
Suits to establish or contest right of enhancement or abatement of rent or to determine amount of rent (Madras Act VIII of 1865, Sections 8, 9, 10, and 11).	...	29	...	...	...	...	29	...	...	...	...	...
Suits relating to ejectment (Section 12).	...	1	...	...	...	...	1	...	...	...	...	...
Suits regarding illegal exaction, distraint, &c., (Sections 5, 17, 20, 35, 36, 49, and 80).	...	161	...	...	...	...	161	...	...	...	...	...
Total ...	3,330	311	1,894	...	...	28	5,563	3,033	...	1,187	...	4,220

No. 10.—*Statement showing the General Result of the Trial of Civil and Revenue Suits in the Courts of Original Jurisdiction in the District of North Arcot in the Year 1876.*

Class of Courts.		Suits remaining from 1875.	Filed in 1876 (including Suits remanded and readmitted).	Received by Transfer.	Total for Disposal.	Transferred to other Courts.	Plaint rejected or returned.	Uncontested.						Contested	Total.		Pending.			Average Duration of Suit.		Referred to Arbitration.	Remarks.
								Dismissed for Default.	Withdrawn with Leave.	Compromised.	Decreed on Confession.	Decreed *ex parte*. For Plaintiff.	Decreed *ex parte*. For Defendant.	Judgment for Plaintiff in whole or part.	Judgment for Defendant.	Disposed of.	Pending.	Over Two Months.	Over Four Months.	Over Twelve Months.	Contested.	Uncontested.		
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Village Courts		623	3,330	...	3,953	...	...	460	89	678	536	661	44	865	86	3,419	534	143	98	172	22	91	...	
Revenue do.		57	311	...	368	...	74	43	34	19	2	3	15	57	76	249	119	93	15	11	296	182	1	
District Munsifs, Assistant Agents, and Assistant Commissioners.	Ordinary ...	822	*1,930	2	2,754	2	1	84	87	497	117	463	60	847	197	2,352	400	99	61	17	576	301	2	* Remanded and readmitted 36
	Small Causes.	416	†3,063	2	3,481	1	3	203	145	867	112	998	167	602	124	3,218	262	66	...	...	215	160	1	† Refiled 30
Small Causes Court.	As Subordinate Judge.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Small Causes.	847	‡1,190	...	2,037	...	62	316	34	502	177	410	6	341	142	1,928	109	109	...	...	42	35	...	‡ Do. 3
Subordinate Judges.	Ordinary ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Small Causes.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
District Courts.	Ordinary ...	5	§29	...	34	1	...	1	...	5	4	1	...	9	5	25	8	4	4	...	106	101	2	§ Do. 1
	Small Causes.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total ...		2,770	9,863	4	12,627	4	140	1,107	389	2,568	948	2,536	292	2,721	630	11,191	1,432	514	178	200	1,257	879	6	

No. 11.—*Statement showing the Business of the Appellate Courts in the District of North Arcot in the Year* 1876.

Class of Courts.	Remaining from 1875.	Instituted in 1876 (including Appeals remanded and re-admitted).	Received by Transfer.	Total for Disposal.	Transferred.	Uncontested.					Contested.			Total disposed of.	Pending.	Pending.		Remanded.	Objections under Section 348 of the Civil Procedure Code.	Objections allowed.
						Dismissed for Default or under Sections 5 and 6, Act XXIII of 1861.	Withdrawn, compromised, or decreed on Confession.	Confirmed.	Modified.	Reversed.	Confirmed.	Modified.	Reversed.			Over Four Months.	Over Twelve Months.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Subordinate Judge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Judge of Small Cause Courts as Subordinate Judges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
District Judge, Agent, and Judicial Commissioner. Revenue ..	..	24	..	24	..	2	..	..	..	..	2	..	19	23	1	..	..	12	..	..
District Judge, Agent, and Judicial Commissioner. Civil ..	34	134	..	168	..	6	2	..	..	..	84	16	46	154	14	1	..	2	7	1
Collector's Revenue Courts	8	111	..	119	..	..	..	63	6	7	2	..	..	78	41	41	..	..	..	..
Total ..	42	269	..	311	..	8	2	63	6	7	88	16	65	255	56	42	..	14	7	1

No. 12.—*Statement showing the Number of Suits, Original and Appeal, pending in the District of North Arcot, classified according to the Years in which they were instituted.*

Courts.		Years in which instituted.															Total.	
		Previous to, or in, 1869.		In 1870.		In 1871.		In 1872.		In 1873.		In 1874.		In 1875.	In 1876.			
		Original.	Appeal.	Original.	Appeal.	Original.	Appeal.	Original.	Appeal.	Original.	Appeal.	Original.	Appeal.	Original.	Original.	Appeal.	Original.	Appeal.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
District Munsifs, Assistant Agents, and Assistant Commissioners.	Ordinary	No records.										1	..	19	380	..	400	..
	Small Causes ..											..	..	..	262	..	262	..
Judge of Small Cause Courts.	Subordinate Judges ..											..	..	..	..	..	..	..
	Small Causes ..											..	..	..	..	..	..	..
Subordinate Judge ..	Ordinary											..	..	..	..	..	..	..
	Small Causes ..											..	..	..	109	..	109	..
District Judges, Agents, and Judicial Commissioners.	Ordinary											..	..	..	8	15	8	15
	Small Causes ..											..	..	..	..	..	..	..
										Total ..		1	..	19	759	15	779	15

No. 13.—*Statement showing the Execution of Decrees in the Civil and Revenue Courts of the District of North Arcot in the Year 1876.*

Class of Courts.		Application to execute Decrees.				Decrees.		Nature and Number of Coercive Processes issued.						Orders under Section 243 of the Civil Procedure Code.
		Pending from 1875.	Filed in 1876.	Received by Transfer.	Total for Disposal.	Completely executed.	Partially executed.	Pending at the end of 1876.	Imprisonment of Person.	Moveable Property.		Immoveable Property.		
										Attached.	Sold.	Attached.	Sold.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14
District Munsifs, Assistant Agents, and Assistant Commissioners.	Ordinary	376	2,089	128	2,593	694	1,535	322	91	315	142	966	524	..
	Small Causes	202	2,597	2	2,801	854	1,703	150	645	320	112	5	3	..
Judge of Small Cause Courts.	As Subordinate Judges ..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Small Causes	153	1,162	..	1,315	334	948	33	16	198	125	..	..	..
Subordinate Judge ..	Ordinary	..	..	..	..	..	..	..	..	..	..	..	..	..
	Small Causes	..	..	..	..	..	..	..	..	..	..	..	..	..
District Judge, Agents, and Judicial Commissioners.	Ordinary	22	100	..	122	75	19	19	4	10	4	41	15	..
	Small Causes	..	..	..	..	..	..	..	..	..	..	..	..	..
Revenue Courts		3	17	..	20	20	..	..	..	..	..	..	..	..
Total ..		756	5,965	130	6,851	1,977	4,205	524	756	843	383	1,012	542	..

No. 14.—*Statement of Revenue Suits filed before each Revenue Officer in the North Arcot District in the Year* 1876 *and the Number of Appeals to the Collector.*

Names of Officers.	Number of Suits filed under VI of 1831.	Number of Suits in which Appeals have been preferred to the Collector.	How disposed of.
Sub-Collector	28	10	Of these 5 cases were dismissed and the other 5 rejected.
Head Assistant Collector ..	14	8	Of these 2 were dismissed, 1 case remanded, 2 cases quashed, 3 rejected.
General Duty Deputy Collector.	110	6	Of these 5 dismissed and 1 rejected.
Assistant Collector	33	..	No appeals preferred against Assistant Collector's decisions.
Total ..	185	24	

No. 15.—*Statement showing the Result of Appeal in Criminal Cases in the District of North Arcot in the Year* 1876.

Courts.	Number of Persons.										Pending.	
	Appeals remaining from 1875.	Filed in 1876.	Total for disposal.	Appeals rejected under Section 278.	After perusal of Records.			Otherwise disposed of by Transfer, Death, &c.	Total of Columns 5 to 9.	Further Inquiry or Evidence ordered.	Cases.	Persons.
					Sentences confirmed.	Sentences modified.	Sentences reversed.					
1	2	3	4	5	6	7	8	9	10	11	12	13
Divisional Magistrate.	32	249	281	3	131	62	66	1	263	21	8	18
District Magistrate.	..	50	50	..	34	3	7	..	44	..	2	6
Session Court ..	1	39	40	9	10	6	11	..	36	3	4	4
Total ..	33	338	371	12	175	71	84	1	343	24	14	28

No. 16.—*Statement showing the Use of Juries and Assessors in the Criminal Courts in the District of North Arcot in the Year* 1876.

Courts.	Established or Average Number of Juries or Assessors in any one Trial.	Remaining & committed for Trial.		Number of Persons in Jury Trials.			Number of Persons in Assessors' Trial.				Pending.	
		Cases.	Persons.	Discharged without Trial or convicted on Plea of Guilty.	After Trial.		Discharged without Trial or convicted on Plea of Guilty.	After Trial.			Cases.	Persons.
					Convicted.	Acquitted.		Convicted or acquitted, the Judge agreeing with the Assessors.	Convicted or acquitted, the Judge differing from the Assessors.	Convicted or acquitted, the Judge agreeing with one Assessor only.		
1	2	3	4	5	6	7	8	9	10	11	12	13
Session Court. Assessors ...	2	130	333	8	51	133	...	...	...	4	99	37
Jury ...	5											

No. 17.—*Statement showing the Number of Cases filed before and disposed of by different Magistrates during the Years* 1870, 1871, 1872, 1873, 1874, 1875, *and* 1876 *in the North Arcot District.*

Magistrates.	Years.	Number of Triable Cases filed.		Persons tried, &c.			Number of Committable Cases filed.		Persons committed, &c.		
		Cases.	Persons.	Discharged.	Committed.	Total.	Cases.	Persons.	Discharged.	Committed.	Total.
District Magistrate.	1870 ..	9	18	4	10	14	6	23	2	21	23
	1871 ..	4	5	7	2	9	3	3	2	1	3
	1872 ..	7	12	5	7	12	..	..	..	..	...
	1873 ..	52	163	120	43	163	3	5	2	3	5
	1874 ..	46	76	40	35	75	1	1	1	..	1
	1875 ..	32	87	44	44	88	2	2	..	1	1
	1876 ..	75	160	75	72	147	3	8	..	9	9
		225	521	295	213	508	18	42	7	35	42
Joint Magistrate.	1870 ..	106	161	79	81	160	3	22	..	22	22
	1871 ..	180	343	201	133	334	18	72	23	48	71
	1872 ..	273	477	355	117	472	15	29	12	18	30
	1873 ..	280	540	452	90	542	7	11	4	7	11
	1874 ..	204	490	354	145	499	3	4	1	3	4
	1875 ..	194	454	398	59	457	8	10	4	6	10
	1876 ..	269	671	620	49	669	7	15	5	10	15
		1,506	3,136	2,459	674	3,133	61	163	49	114	163
Head Assistant Magistrate.	1870 ..	110	198	97	99	196	9	25	9	16	25
	1871 ..	250	511	353	104	457	23	27	11	7	18
	1872 ..	211	450	352	133	485	21	25	20	10	30
	1873 ..	220	422	265	148	413	13	16	14	6	20
	1874 ..	104	193	155	63	218	6	12	4	8	12
	1875 ..	92	197	145	37	182	1	1	..	1	1
	1876 ..	147	365	244	124	368	2	3	3	..	3
		1,143	2,336	1,611	708	2,319	75	109	61	48	109
Asst. and Addl. Dy. Magistrate.	1870 ..	240	512	343	141	484	25	74	22	52	74
	1871 ..	197	423	287	129	416	10	18	4	14	18
	1872 ..	513	1,081	778	217	995	37	67	36	29	65
	1873 ..	569	1,196	1,081	225	1,306	21	34	17	19	36
	1874 ..	62	108	66	35	101	9	14	7	7	14
	1875 ..	90	179	150	40	190	8	21	8	13	21
	1876 ..	364	872	721	158	879	26	47	22	25	47
		2,035	4,371	3,426	945	4,371	136	275	116	159	275
General Duty Dy. Magistrates.	1870 ..	92	185	88	92	180	5	23	15	8	23
	1871 ..	172	395	298	88	386	10	20	11	5	16
	1872 ..	209	489	352	127	479	3	3	5	2	7
	1873 ..	82	255	233	24	257	4	16	16	..	16
	1874 ..	122	309	261	58	319	4	5	4	1	5
	1875 ..	377	982	825	164	989	11	38	32	3	35
	1876 ..	118	326	241	78	319	2	14	17	..	17
		1,172	2,941	2,298	631	2,929	39	119	100	19	119
All Sub-Magistrates.	1870 ..	3,514	8,349	4,993	3,259	8,252	184	391	200	186	386
	1871 ..	4,205	10,841	7,694	2,916	10,610	173	462	287	138	425
	1872 ..	5,221	13,490	10,035	3,527	13,562	176	371	278	119	397
	1873 ..	5,809	14,657	10,974	3,690	14,664	138	372	214	160	374
	1874 ..	5,668	13,360	9,537	3,590	13,127	166	426	241	183	424
	1875 ..	5,892	13,778	9,351	4,632	13,983	152	377	245	134	379
	1876 ..	6,625	15,584	10,902	4,379	15,281	242	1,141	478	436	914
		37,034	90,059	63,486	25,993	89,479	1,231	3,540	1,943	1,356	3,299

No. 18.—*Statement of Persons Tried, Convicted, and Acquitted, and of Property lost and recovered, for a series of Ten Years from* 1870 *to* 1879 *in the District of North Arcot.*

—	Number of Persons tried during the Year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property		Number of Persons tried during the year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property	
					Stolen.	Recovered.					Stolen.	Recovered.
	1870.						1871.					
Nature of Offences.					Rs.	Rs.					Rs.	Rs.
1. Murder	47	31	16	..	20	..	84	78	6	..	659	199
2. Culpable homicide.	21	13	8	..	..	..	11	8	3	..	..	..
3. Rape	5	1	4	..	..	..	6	4	2	..	..	..
4. Hurts and assaults.	2,257	1,745	506	6	1	1	3,067	2,526	529	12	15	..
5. Other offences against person.	317	255	62	..	..	..	351	278	69	4	12	..
6. Dacoity	85	60	12	13	1,585	25	103	76	22	5	2,824	404
7. Robbery ..	71	24	47	..	511	179	38	21	17	..	441	156
8. House-breaking.	427	196	231	..	34,932	3,850	367	165	202	..	20,152	3,144
9. Theft	1,446	602	829	15	18,837	4,304	1,586	772	803	11	18,404	4,252
10. Other offences against property	1,460	1,096	348	16	3,449	1,509	1,674	1,276	352	46	2,649	740
11. Other offences against Penal Code	1,997	1,374	601	22	1,032	1,000	2,381	1,818	477	86	674	12
Total ..	8,133	5,397	2,664	72	60,367	10,868	9,668	7,022	2,482	164	45,830	8,907
12 Special and Local Laws.	4,283	898	3,383	2	247	195	4,038	1,169	2,862	7	212	165
Grand Total ..	12,416	6,295	6,047	74	60,614	11,063	13,706	8,191	5,344	171	46,042	9,072
	1872.						1873.					
Nature of Offences.					Rs.	Rs.					Rs.	Rs.
1. Murder	107	84	18	5	..	..	42	31	10	1	63	..
2. Culpable homicide.	13	9	4	..	4	1	4	4	..	..	..	..
3. Rape	8	7	1	..	..	..	6	6	..	..	..	..
4. Hurts and assaults.	3,892	3,040	748	104	3	1	4,530	3,894	630	6	..	..
5. Other offences against person.	529	460	58	11	84	..	565	468	85	12	46	..
6. Dacoity ..	44	42	2	..	681	97	69	48	10	11	637	107
7. Robbery ..	99	63	34	2	1,231	187	73	52	19	2	1,197	131
8. House-breaking.	472	189	263	20	33,494	2,965	418	172	222	24	32,640	4,209
9. Theft	2,515	1,371	984	160	24,041	5,852	2,487	1,300	1,026	101	31,068	7,527
10. Other offences against property.	3,659	3,016	527	116	11,419	522	3,647	3,139	465	43	8,884	1,759
11. Other offences against Penal Code	1,489	916	533	40	966	891	1,492	843	584	65	3,215	95
Total ..	12,827	9,197	3,172	458	71,923	10,516	13,333	10,017	3,051	265	77,750	13,828
12. Special and Local Laws.	5,083	1,724	3,338	21	173	142	4,320	1,385	2,932	3	140	112
Grand Total ..	17,910	10,921	6,510	479	72,096	10,658	17,653	11,402	5,983	268	77,890	13,940

No. 18.—*Statement of Persons Tried, Convicted, and Acquitted, and of Property lost and recovered, for a series of Ten Years from* 1870 *to* 1879 *in the District of North Arcot*—(Contd.)

—	Number of Persons tried during the Year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property Stolen.	Property Recovered.	Number of Persons tried during the Year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property Stolen.	Property Recovered.
	1874.						1875.					
Nature of Offences.					Rs.	Rs.					Rs.	Rs.
1. Murder	45	28	12	5	27	..	69	53	12	4	63	51
2. Culpable homicide.	20	10	7	3	..	..	28	25	2	1	..	..
3. Rape	5	2	3	..	..	..	4	1	3	..	..	..
4. Hurts and assaults.	3,779	3,185	582	12	..	..	4,182	3,426	755	1	2	2
5. Other offences against person.	801	485	266	50	376	3	449	375	68	6	..	..
6. Dacoity ..	80	51	27	2	1,620	262	90	78	12	..	8,093	93
7. Robbery ..	61	22	35	4	879	170	48	37	11	..	926	21
8. House-breaking.	476	218	246	12	35,114	3,656	377	190	178	9	48,291	1,304
9. Theft	2,307	1,136	1,077	94	38,307	10,198	2,192	1,195	953	44	33,226	14,383
10. Other offences against property.	2,713	2,293	354	66	9,831	1,653	3,035	2,584	414	37	13,464	8,042
11. Other offences against Penal Code.	796	538	248	10	..	..	1,779	889	841	49	..	..
Total ..	11,083	7,968	2,857	258	86,154	15,942	12,253	8,853	3,249	151	104,065	23,896
12. Special and Local Laws.	4,695	1,540	3,141	14	174	152	4,836	1,176	3,660	..	139	125
Grand Total ..	15,778	9,508	5,998	272	86,328	16,094	17,089	10,029	6,909	151	1,04,204	24,021
	1876.						1877.					
Nature of Offences.					Rs.	Rs.					Rs.	Rs.
1. Murder	80	56	30	11	221	18	145	88	32	25	379	35
2. Culpable homicide.	14	10	1	3	..	..	75	48	13	14	1	..
3. Rape	16	13	3	..	..	..	8	8	..	..	..	..
4. Hurts and assaults.	4,031	3,442	589	..	120	..	2,330	1,891	432	7	60	10
5. Other offences against person.	405	307	98	..	120	..	182	136	37	9	26	..
6. Dacoity	824	461	31	332	17,492	520	1,993	1,338	436	219	46,502	9,260
7. Robbery ..	92	55	30	7	1,440	290	226	82	113	31	2,765	452
8. House-breaking.	888	366	472	50	43,288	4	2,593	659	1,872	62	79,200	13,654
9. Theft	2,670	1,331	1,231	108	30,746	7,430	7,138	1,991	5,035	112	59,395	20,479
10. Other offences against property.	2,867	2,361	385	121	10,355	5,111	2,012	1,405	551	56	32,720	2,537
11. Other offences against Penal Code.	1,617	973	626	18	..	..	1,500	645	786	69	59	59
Total ..	13,504	9,375	3,479	650	1,03,782	13,373	18,202	8,291	9,307	604	2,21,107	46,486
12. Special and Local Laws.	4,752	1,254	3,496	2	168	118	4,920	723	4,193	4	299	247
Grand Total ..	18,256	10,629	6,975	652	1,03,950	13,491	23,122	9,014	13,500	608	2,21,406	46,733

No. 18.—*Statement of Persons Tried, Convicted, and Acquitted, and of Property lost and recovered, for a series of Ten Years from* 1870 *to* 1879 *in the District of North Arcot*—(Contd.)

——	1878.						1879.					
	Number of Persons tried during the Year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property.		Number of Persons tried during the Year.	Acquitted or discharged.	Convicted.	Remaining under trial.	Property.	
					Stolen.	Recovered.					Stolen.	Recovered.
Nature of Offences.					Rs.	Rs.					Rs.	Rs.
1. Murder	105	79	22	4	1,225	4	36	17	13	6	153	..
2. Culpable homicide.	62	53	8	1	..	..	12	12	..	..	..	..
3. Rape	4	3	1	..	..	..	9	9	..	..	..	..
4. Hurts and assaults.	2,678	2,173	494	11	..	..	3,037	2,503	532	2	..	..
5. Other offences against person.	287	231	54	2	193	47	286	233	48	5	..	..
6. Dacoity	656	442	135	79	15,688	1,058	183	110	62	11	1,524	219
7. Robbery ..	138	51	79	8	1,779	240	80	27	45	8	2,197	501
8. House-breaking.	1,339	353	932	54	43,463	7,463	469	185	255	29	25,618	2,544
9. Theft	4,386	1,496	2,635	255	53,745	16,065	2,480	1,467	889	124	28,225	8,486
10. Other offences against property.	2,728	2,191	502	35	8,619	1,502	2,747	2,371	326	50	6,508	288
11. Other offences against Penal Code.	1,556	907	615	34	..	..	1,467	802	584	81	5	3
Total ..	13,939	7,979	5,477	483	1,24,712	26,369	10,806	7,736	2,754	316	64,230	12,041
12. Special and Local Laws.	4,375	864	3,511	..	1,195	1,118	3,180	761	2,418	1	72	53
Grand Total ..	18,314	8,843	8,988	483	1,25,907	27,487	13,986	8,497	5,172	317	64,302	12,094

No. 19.—*Statement showing the Progress of Education in the North Arcot District for a series of Ten Years.*

Description of Schools.		1869-70.			1870-71.			1871-72.			1872-73.			1873-74.		
		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.	
			Boys.	Girls.		Boys.	Girls.		Boys.	Girls.		Boys.	Girls.		Boys.	Girls.
A.—Government Schools.			Records missing.													
1. Maintained from Provincial Funds.	Higher ..	1			1	329	..	1	284	..	1	356	..	1	357	..
	Middle ..	6			6	718	..	6	586	..	6	603	..	6	561	..
	Lower ..	..			..	..	..	..	..	..	..	..	..	2	119	..
2. Maintained from Local or Municipal Funds.	Higher ..	..			..	..	..	..	..	..	..	..	..	..	..	..
	Middle ..	..			..	..	..	..	..	..	..	..	..	..	..	..
	Lower ..	..			..	..	..	..	..	..	2	82	..	4	153	19
	Total ..	7	1,012	..	7	1,047	..	7	870	..	9	1,041	..	13	1,190	19
B.—Schools Aided.																
1. By Salary Grant	Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Middle ..	4	336	..	5	377	..	4	310	85	5	394	..	5	380	..
	Lower ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. By Result Grant	Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Middle ..	..	..	..	23	664	121	33	738	264	28	943	26	43	1,614	132
	Lower ..	21	2,435	..	114	2,673	60	137	4,175	22	212	5,428	453	333	8,685	458
3. Combined Salary and Result Grant.	Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Middle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Lower ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ..	125	2,771	..	142	3,714	181	174	5,223	371	245	6,765	479	381	10,679	590
C.—Schools under Inspection for Result Grant but not Aided.	Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Middle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Lower ..	..	..	..	39	892	22	41	473	..	191	4,305	..	192	4,139	..
	Total ..	..	..	..	39	892	22	41	473	..	191	4,305	..	192	4,139	..

No. 19.—*Statement showing the Progress of Education in the North Arcot District for a series of Ten Years*—(Continued).

Description of Schools.	1874-75.			1875-76.			1876-77.			1877-78.			1878-79.		
	Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.		Number of Schools.	Number of Pupils.	
		Boys.	Girls.		Boys.	Girls.		Boys.	Girls.		Boys.	Girls.		Boys.	Girls.
A.—Government Schools.															
1. Maintained from Provincial Funds. Higher ..	1	372	..	1	332	..	1	284	..	1	263	..	1	294	..
Middle ..	7	697	..	6	442	..	6	439	..	5	389	..	7	558	..
Lower ..	2	34	25	2	52	30	3	44	117	5	144	130	4	93	116
2. Maintained from Local or Municipal Funds. Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lower ..	3	147	..	5	293	..	5	400	..	7	542	..	9	551	..
Total ..	13	1,250	25	14	1,119	30	15	1,167	117	18	1,338	130	21	1,496	116
B.—Schools Aided.															
1. By Salary Grant .. .. Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	1	256	..
Middle ..	6	502	..	5	351	24	5	343	28	4	326	18	4	255	15
Lower ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. By Result Grant .. .. Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middle ..	50	1,874	274	36	1,296	148	106	1,732	280	..	..	..	..	..	..
Lower ..	296	7,123	449	328	7,890	497	285	6,878	334	192	3,963	400	201	4,202	308
3. Combined Salary and Result Grant. Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lower ..	1	38	..	17	665	..	17	618	..	91	2,627	..	83	2,483	..
Total ..	353	9,537	723	386	10,202	669	413	9,571	642	287	6,916	418	289	7,196	323
C.—Schools under Inspection for Result Grant, but not Aided. Higher ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Middle ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lower ..	212	4,673	162	181	4,776	103	251	4,702	125	140	2,504	131	138	2,347	165
Total ..	212	4,673	162	181	4,776	103	251	4,702	125	140	2,504	131	138	2,347	165

No. 20.—*Statement showing Receipts and Expenditure for Special Funds for the last Five Years.*

	Official Year 1874-75.					Official Year 1875-76.			Official Year 1876-77.			Official Year 1877-78.			Official Year 1878-79.		
	Balance at the beginning of the Year 1874-75.	Receipts during the Year.	Total.	Expenditure during the Year.	Balance at the end of the Year.	Receipts during the Year including Balance.	Expenditure during the Year.	Balance at the end of the Year.	Receipts during the Year including Balance.	Expenditure during the Year.	Balance at the end of the Year.	Receipts during the Year including Balance.	Expenditure during the Year.	Balance at the end of the Year.	Receipts during the Year including Balance.	Expenditure during the Year.	Balance during the Year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Jungle Conservancy Fund ...	14,706	10,678	25,384	10,551	14,833	41,571	13,388	28,183	47,883	17,322	30,561	38,368	23,268	15,100	28,960	18,380	10,570
2. Natal Grass do. ...	102	...	102	...	102	102	...	...	...	...	...	...	...	...	...	...	...
3. Cattle Pound do. ...	...	6,863	6,863	6,863	...	8,208	8,208	...	8,268	8,268	...	9,186	9,186	...	8,047	8,047	...
4. Public Bungalow do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. Endowment do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Village Service do. ...	17,707	1,35,506	1,53,213	1,13,763	39,450	1,76,422	1,30,946	45,476	1,23,847	93,673	30,174	76,419	65,776	10,643	1,34,566	1,43,118	—8,552
7. Canal and Ferry do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8. Irrigation Cess do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	32,515	1,53,047	1,85,562	1,31,177	54,385	2,26,201	1,52,644	73,659	1,79,998	1,19,263	60,735	1,23,973	98,230	25,743	1,71,573	1,69,555	2,018

No. 21.—*General Summary showing the Distribution of the Prisoners of all Classes confined in the Central Jail, Vellore, during the Years* 1874, 1875, 1876, 1877, *and* 1878.

1	2	3	4			5			6			7			8			9			10		
Year.	Place of Confinement.	Classes of Prisoners.	Remained at the commencement of the Year.			Received during the Year.			Total.			Discharged from all Causes.			Remaining at the end of the Year.			Daily Average Number of each Class.			Total Daily Average of whole Jail.		
			M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1874	Central Prison, Vellore.	Convicts...	937	31	968	305	23	328	1,242	54	1,296	308	14	322	934	40	974	925·96	32·18	958·14	926·96	32·18	959·14
		Insane ...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1			
1875	Do.	Convicts...	934	40	974	296	28	324	1,230	68	1,298	339	29	368	891	39	930	887·45	41·68	929·13	888·45	41·68	930·13
		Insane ...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1			
1876	Do.	Convicts...	891	39	930	434	18	452	1,325	57	1,382	353	24	377	972	33	1,005	927·66	35·02	962·68	928·66	35·02	963·68
		Insane ...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1			
1877	Do.	Convicts...	972	33	1,005	721	58	779	1,693	91	1,784	655	44	699	1,038	47	1,085	946·67	32·32	978·99	947·67	32·32	979·99
		Insane ...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1			
1878	Do.	Convicts...	1,038	47	1,085	304	46	350	1,342	93	1,435	282	49	331	1,060	44	1,104	1064·60	51·49	1116·09	1065·60	51·49	1117·09
		Insane ...	1	...	1	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1			

No civil, under-trial, security, or State prisoners were confined in the Central Jail, Vellore, during 1874 to 1878.

No. 21-A.—*Statement showing the Religion, Ages, and previous Occupation of the Convicts in the Central Jail at Vellore during the Years* 1874, 1875, 1876, 1877, *and* 1878.

Year.	1 Religion. a Christians. a Europeans. M.	a Europeans. F.	b Eurasians. M.	b Eurasians. F.	c Natives. M.	c Natives. F.	b Mahomedans. M.	b Mahomedans. F.	c Hindus. M.	c Hindus. F.	d Buddhists and Jains. M	d Buddhists and Jains. F	e All other Classes. M	e All other Classes. F	2 Age. a Under 16. M.	a Under 16. F.	b 16 to 40. M.	b 16 to 40. F.	c 40 to 60. M.	c 40 to 60. F.	d Above 60. M.	d Above 60. F.	3 Previous Occupation. a Of Independent property. M.	b Agriculturists. M.	c Non-Agriculturists. M.	d Domestic Servants. M.	e Government servants. M.	4 f No occupation. M.	f No occupation. F.	g Married. F.	h Unmarried. F.	i Widows. F.	j Prostitutes. F.	Total. M.	Total. F.	Total.
1874	1	...	1	...	3	...	57	1	870	30	...	...	10	...	...	1	701	19	223	7	18	4	33	623	182	22	43	39	15	3	12	1	942	31	973
1875	1	...	...	...	4	...	61	...	851	41	...	...	27	...	3	...	703	30	221	8	17	3	49	365	418	9	28	75	19	3	17	2	944	41	985
1876	...	...	...	...	4	...	55	2	828	37	...	...	32	...	4	...	682	31	212	6	21	2	121	384	13	347	16	38	21	4	14	...	919	39	958
1877	3	...	1	...	1	1	57	1	919	33	...	...	36	...	9	...	805	29	188	4	14	2	80	449	67	322	31	67	17	2	16	...	1,016	35	1,051
1878	1	...	...	...	2	...	44	1	977	47	...	...	38	...	18	...	838	42	185	6	21	...	35	645	171	11	60	140	27	8	13	...	1,062	48	1,110

No. 21-B.—*Statement showing the Employment of Convicts as Prison Officers in the Central Jail, Vellore, during the Years* 1874, 1875, 1876, 1877, *and* 1878.

1 Year.	2 Jail.	3 Average Number of Prisoners of all Classes. M.	3 F.	4 Total Number employed as Prison Officers. M.	4 F.	5 Average Number employed. M.	5 F.	6 Ratio of Column 5 to Column 3.	7 Number reduced or otherwise punished. M.	7 F.
1874	Vellore Central Jail ...	925·96	32·18	196	3	99·63	1·80	10·54	77	4
1875	Do. do. ...	887·45	41·68	186	2	103·	1·20	M. 11·60 F. 2·87	61	...
1876	Do. do. ...	928·66	35·02	187	2	108·43	1·85	11·67 5·28	40	...
1877	Do. do. ...	947·67	32·32	226	2	95·96	·59	10·12 1·82	90	...
1878	Do. do. ...	1065·60	51·49	231	6	113·12	3·61	10·61 7·01	107	2

No. 21-C.—*Statement showing the state of Education of the Convicts imprisoned and released from the Central Jail, Vellore, during* 1875, 1876, 1877, *and* 1878.

Year.	3		4						5		6		7		8						9					
	Number imprisoned during the year. *		Of those in Column 3 there were						Daily Average Number of Convicts.		Daily Average Number under instruction.		Number released during the year.		Of those in Column 7 there were						No. released during the year after more than 6 months in jail.					
			Unable to read or write.		Able to read or write a little.		Able to read or write well.								Unable to read and write.		Able to read and write a little.		Able to read and write well.		Unable to read and write.		Able to read and write a little.		Able to read and write well.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1875 ..	10	1	6	1	..	..	4	..	887·45	41·68	834·98	..	236	11	112	11	102	..	22	..	105	7	102	..	20	..
1876 ..	28	..	26	..	1	..	1	..	927·66	35·02	874·89	..	226	14	93	14	96	..	37	..	93	9	94	..	34	..
1877 ..	44	2	34	2	3	..	7	..	946·67	32·32	824·21	..	316	39	170	39	111	..	35	..	169	19	101	..	31	..
1878 ..	24	1	17	1	2	..	5	..	1,064·60	51·49	795·07	..	180	36	157	36	14	..	9	..	147	13	14	..	7	..

* This column includes only those who were received into this jail by direct committal.

No. 21-D.—*Statement showing the Employment of the Convicts in the Central Jail, Vellore, during the Years* 1875, 1876, 1877, *and* 1878.

Year.	3		4		5		6							7		
	Average Number sentenced to labour.		Average Number not sentenced to labour.		Average Number of Effectives.		Employment.							Ratio per Cent. on Column 5 of those employed.		
							a	b	c	d	e	f				
	M.	F.	M.	F.	M.	F.	Prison Officers.	Prison Servants.	Building and repairing Jail.	On Garden.	On Manufactures.	Extra-mural.		As Prison Officers.	As Prison Servants.	On Manufactures.
1875	886·79	41·18	·66	·50	752·29	30·03	104·20	128·09	13·79	40·32	460·26	35·63		13·31	16·37	58·83
1876	927·52	34·02	·14	1·	780·10	28·06	110·28	117·88	27·78	53·03	457·39	41·80		13·64	14·58	56·59
1877	946·35	31·97	·32	·35	774·01	25·11	96·55	113·79	13·90	17·64	547·91	9·33		12·08	14·23	68·56
1878	1,064·60	51·49	..	..	872·94	42·71	116·73	89·25	32·96	11·50	665·21	..		12·74	9·74	72·64

No. 21-D.—*Statement showing the Results of the Employment of Convicts in the Central Jail at Vellore during the Years 1875, 1876, 1877, and 1878.*

—	3						4		
	a	b	c	d	e	f	a	b	c
	Cash received for Labour or Articles sold during the Year.	Value of Manufactured Goods supplied for Government purposes.	Value of Manufactured Goods remaining in store.	Value of Raw Material in Store.	Value of Plant and Machinery.	Total Credits.	Value of Manufactured Goods in Store on 1st January.	Value of Raw Material in Store on 1st January.	Value of Plant and Machinery in Store on 1st January.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1875 ..	22,088 14 10	59,419 14 11	25,515 8 1	6,829 14 5	2,667 5 11	1,16,612 14 2	26,312 6 2	4,901 3 9	1,700 6 10
	91 4 0	..							
1876 ..	17,357 15 10	75,939 1 7	23,217 7 2	8,950 11 8	3,034 13 2	1,28,771 13 11	25,515 8 1	6,829 14 5	2,667 5 11
	145 0 6	126 12 0							
1877 ..	20,432 14 0	75,358 7 2	23,655 15 4	14,722 0 11	3,174 10 4	1,37,706 10 0	23,217 7 2	8,950 11 8	3,034 13 2
	78 9 3	284 1 0							
1878 ..	28,089 14 6	89,023 12 1	45,148 15 1	15,300 10 9	3,479 12 0	1,81,528 8 7	23,655 15 4	14,722 0 11	3,174 10 4
	224 8 2	261 0 0							

—	4—(*Continued*).		5			6			7
	d	e	a	b	c	a	b	c	
	Cash expended on Raw Material, Plant, &c., during the Year.	Total Debits.	Excess of Credits or Profits.	Average Profit per Head of Effectives.	Excess of Debits or Loss.	Excess of 3a over 4d or Cash Profits.	Average Cash Profit per Head of Effectives.	Excess of 4d over 3a or Cash Loss.	Amount of outstanding Bills due to Jail.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1875 ..	61,104 5 6	94,018 6 3	16,221 12 1	20 10 8	..	..	..	45,299 14 6	25,063 7 2
1876 ..	58,563 10 0	93,576 6 5	35,195 7 6	43 8 9	..	..	..	41,205 10 2	9,187 13 3
1877 ..	76,441 10 1	1,11,644 10 1	26,061 15 11	32 9 9	..	..	..	56,008 12 1	2,327 8 0
1878 ..	94,528 9 3	1,36,081 3 10	45,447 4 9	49 10 2	..	..	..	66,438 10 9	8,694 13 7

The amount shown in clarendon figures in column 3a is the amount of hire of convicts recovered in cash.
Do. do. do. column 3b do. do. adjusted by book entry.

No. 21-E.—*Showing the Offences committed by the Convicts and the Punishments inflicted on them in the Central Jail, Vellore, during* 1875, 1876, 1877, *and* 1878.

Year.	3	4	5								6														7
	Average No. of Convicts.	Criminal Offences.	Breaches of Jail Rules.								Punishments inflicted.														
			Smoking or having possession of forbidden Articles.		Offences relating to work.		Other Offences against Prison discipline.		Total offences.		a		a By Jail Officers.								c				Ratio of Col. 6 to Col. 3.
											By Criminal Courts.		a Separate Confinement.		b Reduced Diet.		c Separate Confinement with Reduced Diet.		d Corporal Punishment.	e Other punishments.*	Total Punishments.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	
1875 ...	887·45	41·68	1	1	105	8	162	54	258	63	525	125	1	1	55	31	117	63	...	...	60	517	80	730	175	99·55
1876 ...	927·66	35·02	1	...	146	...	167	3	231	9	544	12	...	...	107	6	100	7	...	...	98	548	12	853	25	91·20
1877 ...	946·67	32·32	...	...	149	2	196	...	289	36	594	38	...	...	80	8	135	21	...	...	71	575	28	861	57	93·77
1878 ...	1,064·60	51·49	2	...	133	5	255	48	318	31	708	84	2	...	65	9	256	72	...	...	116	652	46	1,091	127	109·13

* Other punishment includes fine of marks, reduction of class, refettering, &c.

No. 21-F.—*Statement showing the Sickness and Mortality among the Convicts in the Central Jail at Vellore during the Years* 1874, 1875, 1876, 1877, *and* 1878.

Year.	3			4			5			6			7			8			9											
	Capacity of the Jail Barracks at 40 Superficial and 600 Cubic-Feet per Head			Average Daily Strength.			Maximum Population on any one day.			Number admitted into Hospital.			Daily Average Number of Sick.			Number of Deaths in and out of Hospital			Ratio Per centage of Average Strength											
																			Of Admissions into Hospital.			Of Daily Average Number of Sick.			Of Deaths from Cholera.			Of Deaths from all other causes both in and out of Hospital.			Of Deaths from all causes both in and out of Hospital.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T	M.	F.	T.	M.	F.	T.	M.	F.	T	M.	F.	T.	M.	F.	T.
1874 ...	949	88	1,037	925·96	32·18	958·14	947	40	987	599	24	623	19·06	1·34	20·41	8	2	10	64·68	7·46	65·02	2·05	4·76	2·13	...	...	...	·86	·62	1·04	·86	·62	1·04
1875 ...	949	88	1,037	888·45	41·68	930·13	940	51	1,000	592	32	624	16·02	1·23	17·25	29	2	31	66·63	76·77	67·07	1·80	2·95	1·85	...	...	...	3·26	4·79	3·33	3·26	4·79	3·33
1876 ...	993	88	1,081	928·66	35·02	963·68	973	34	1,007	333	11	344	9·98	·38	10·36	13	...	13	35·85	31·41	35·69	1·07	1·08	1·07	...	...	...	1·39	...	1·34	1·39	...	1·34
1877 ...	993	88	1,081	947·67	32·32	979·99	1,044	68	1,112	414	13	427	14·74	·29	15·03	21	1	22	43·68	40·22	43·57	1·55	·89	1·53	...	...	...	2·21	3·09	2·24	2·21	3·09	2·24
1878 ...	993	88	1,081	1,065·60	51·49	1,117·09	1,111	46	1,157	293	14	307	9·69	·36	10·04	10	1	11	27·49	27·18	27·48	·90	·67	·89	...	...	...	1·03	1·94	1·07	1·03	1·94	1·07
																1	...	*1														

Drowned accidentally.

No. 21-G.—*Statement showing the Expenditure in Guarding and Maintaining the Prisoners in the Central Jail at Vellore during the Years* 1874, 1875, 1876, 1877, *and* 1878, *excluding the Cost of Building new Jails, of Additions, Alterations, and Repairs.*

3								4		5		6	
Average Number of Prisoners.								Rations.		Establishment.		Police Guard.	
								a	b	a	b	a	b
Year.	Convicts.	Civil.	Under trial.	Security.	Insane.	State.	Total.	Total Cost.	Cost per Head of Average Strength excluding Civil Prisoners.	Total Cost.	Cost per Head of Average Strength.	Total Cost.	Cost per Head of Average Strength.
								RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1874	958·14	..	..	..	1	..	959·14	30,206 15 1	31 8 6	18,398 13 6	19 3 3	9,700 0 4	10 2 0
1875	929·13	..	..	..	1	..	930·13	31,812 2 11	34 3 3	16,148 2 2	17 5 9	9,490 1 10	10 3 3
1876	962·68	..	..	..	1	..	963·68	33,398 10 7	34 10 6	16,028 3 10	16 10 1	8,279 9 8	8 9 5
1877	978·99	..	..	..	1	..	979·99	61,353 15 3	62 9 8	19,315 14 1	19 11 4	....	....
1878	1,116·09	..	..	..	1	..	1,117·09	46,491 1 4	41 9 11	18,931 11 9	16 15 1	9,781 11 7	8 12 1

7				8		9		10	11
Hospital Charges.				Clothing.		Contingencies.			
a	b	c		a	b	a	b		
Year.	Total Cost.	Cost per Head of Average Strength.	Cost per Head of Average Number Sick.	Total Cost.	Cost per Head of Average Strength.	Total Cost.	Cost per Head of Average Strength.	Grand Total Expenditure.	Total Cost per Head of Average Strength.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1874	....	....	....	2,302 9 1	2 6 5	2,024 7 2	2 1 9	62,632 13 2	65 6 0
1875	209 3 11	0 3 7	12 2 1	2,775 4 5	2 15 8	1,824 5 3	1 15 4	62,259 4 6	66 11 4
1876	274 8 3	0 4 7	26 7 2	2,978 1 9	3 1 5	1,719 1 10	1 12 6	62,678 3 11	65 0 7
1877	559 12 6	0 9 1	37 3 1	3,244 12 0	3 4 11	3,365 0 3	3 6 11	85,839 6 1	89 10 1
1878	355 15 4	0 5 1	35 5 9	3,101 6 3	2 12 5	1,296 13 7	1 2 7	79,958 11 10	71 9 2

No. 22.—*Statement showing the Expenditure in North Arcot District on Public Works from Imperial and Provincial Funds for the last five Years.*

Year.	Imperial.				Provincial.			
	Military.	Civil Buildings.	Agricultural and so on.	Total.	Civil Buildings.	Communications.	Miscellaneous Public Improvements.	Total.
New Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1874-75	487	1,030	47,496	49,013	42,064	..	..	42,064
1875-76	1,164	..	2,10,343	2,11,507	19,682	..	..	19,682
1876-77	2,575	1,717	32,802	37,094	6,468	2,904	..	9,372
1877-78	121	2,231	22,375	24,727	3,640	..	191	3,831
1878-79	1,254	179	2,96,465	2,97,898	957	..	..	957
Total ..	5,601	5,157	6,09,481	6,20,239	72,811	2,904	191	75,906
Repairs.								
1874-75	4,109	406	1,33,930	1,38,445	9,848	..	..	9,848
1875-76	4,280	190	1,34,595	1,39,065	6,741	..	..	6,741
1876-77	1,329	1,221	1,36,849	1,39,399	4,258	..	3	4,261
1877-78	1,197	306	1,75,694	1,77,197	4,254	11,246	10,220	25,720
1878-79	2,074	..	52,280	54,354	5,477	..	..	5,477
Total ..	12,989	2,123	6,33,348	6,48,460	30,578	11,246	10,223	52,047

No. 23.—*List of Heights above Sea-level of G. T. Stations, North Arcot District.*

G. T. Stations.	Height above Sea-level.	
	FEET.	
Kurrangola, S.	338·38	Furnished by Superintendent of Revenue Survey.
Mamandúr, H.S.	431·17	
Anandowalle, H.S.	925·78	
Pullúr, H. S.	1,915·16	
Nagari Nose, H.S.	2,824·11	
Yérpet, H.S.	2,235·39	
Pellimer, H.S.	499·41	
Tirupati Temple, Large Gópuram	634·7	
Kailásaghur, H.S.	2,742·97	
Vellore (Fort Pagoda)	791·03	
Battinkonda, H.S.	1,906·22	
Murruhuthora, H.S.	1,785·72	
Muglee, H.S.	2,461·36	
Sátghur, H.S.	2,317·38	
Dévaraikonda, H.S.	2,731·53	
Pattikonda, H.S.	2,908·32	
Palmanér	2,247·19	
Kistnamakonda, H.S.	2,768·13	

NOTE.—H.S. means hill station; S. means station.

INDEX.

Abdul Waháb, 51, 67, 130.
Abkáry, 124.
Accountant caste, 271.
Ádapa caste, 295.
Adóndai, 21, 89, 176, 199.
Agastéswarakonda, 241.
Agriculture, 306–338.
Ahmednagar, kings of, 25.
Airála, 162.
Aloe fibre, 336.
Ambúr town, 21, 41, 194.
„ , battle of, 35.
„ , drúg, 43, 55, 60, 70, 183.
Ammata caste, 285.
Anakaúr, 208.
Annamalu, 332.
Ândra, kings of, 22.
Animals, 11, 140, 164, 181, 198, 211, 218, 225, 237.
Antiquities, 159, 161, 162, 168, 169, 178, 202, 203, 204, 215.
Anwar-ud-deen, 32, 33, 34, 35, 183, 200.
Aragunda, 160.
Arcot Taluk, 196.
„ town, 1, 31, 32, 35, 36, 38, 42, 43, 45, 50, 59, 61, 68, 69, 101, 199.
„ , defence of, 38.
Area of district, 3.
„ , cultivated, 17, 323.
Ârikê, 332.
Aringulam, 235.
Arkónam, 179.
Arni Jagheer, 50, 68, 70, 129, 245.
„ town, 40, 68, 70, 189, 247.
Artificers, 272.
Arudikarei tenure, 89.
Assessments, 91, 94, 95, 96, 100, 101, 103, 108, 113, 118, 120, 307, 317.
Assessments, reduction of, 102, 111, 112, 113, 116, 117–120.
Aurangzib, 25, 27.
Avenues, 360.
Âvolkonda Jagheer, 2, 163.
Âvulapalle, 127, 236, 240.

Báhmani kings, 23, 24.
Baillie, Colonel, 58, 59.
Baireddipalle, 167.
Balija caste, 276.
Bamboo-workers, 299.
Banbury, Mr. G., Spl. Sub-Collector, 119.
Banda caste, 293.
Bangári Páliem, 75, 129–132.
Bangle Manufacture, 346.
Bápanattam, 138.
Barber caste, 285.
Bellál rajahs, 22.
Bengal gram, 333.
Béri Chetty caste, 268.
Besta caste, 288.
Bhattuturaka caste, 294.
Bhatturazu caste, 294.
Bhógam caste, 294.
Bijapúr, kings of, 25, 27, 190.
Black gram, 333.
Blights, 312.
Bondili caste, 284.
Bourdillon, Mr. J. D., Collr., 115.
Brahman caste, 264.
Brass work, 140, 186, 187, 345.
Brereton, Major, 46, 49.
Brett, Mr., Collector, 116.
Bridges, 14, 186.
Brinjári caste, 296.
Bugga-agraháram, 231.
Bungalows, 378.
Bussy, M., 37, 43, 45.

Carnatic, cession of, 74.
Carnatic-ghur, 65, 211, 213.
Carpets, 173, 342.
Castes, 264–305.
Castor oil, 334.
Cattle, 16, 176, 237, 239, 244, 320.
„ disease, 16, 321.
Chakali caste, 268, 303.
Chámalu, 332.
Chanda Sahib, 30, 34, 35, 36, 37, 38, 41.
Chandragiri Taluk, 137.
„ town, 22, 23, 24, 25, 51, 66, 67, 144.
Chandragiri Páliems, 75, 129-132.
Channels, irrigation, 9, 307.
Cháragal, Poligar of, 80, 169.
Chétpat, 44, 46, 50, 212.
Chéyar river, 8, 36, 202, 204, 209, 245.
„ anicut, 205.
Chillies, 337.
Chittoor Taluk, 155.
„ town, 51, 66, 157.
„ páliems, 51, 62, 75, 129-132.
Chóla kings, 21, 30.
Chólum, 331.
Choultries, 177, 378.
Chout, 28.
Chuckler caste, 268, 303.
Circles, stone, 159, 162, 204, 215.
Civil Courts, 351.
Climate, 15.
Clive, 37, 54, 199.
Coal, 6.
Cockburn, Mr., Collector, 93.
Collectors, list of, 132.
Communications, 12, 364.
Condition of people, 260.
Coffee, 18, 167.

Cooke, Mr., Collector, 112.
Coote, Sir Eyre, 46, 59, 61, 62, 66, 67, 70, 178.
Cotton, 335.
Copper, 7, 219.
Courts, 351.
Crime, 356.
Criminal Courts, 353.
Crops, 17, 323.
Cuddapanattam, 43, 167.
Cultivating castes, 276.
Cumbly weaving, 165, 181, 237, 343.
Cyclones, 16.

Dámalcheruvu, 30, 45, 137, 154.
„ , battle of, 30.
Danish Mission, 405.
Dasabandam tanks, 122, 156.
Dásari caste, 291.
Dási caste, 294.
Davud Khán, 28, 29.
Désúr village, 207.
„ Páliem, 2, 207, 208.
Devadási caste, 294.
Dévikápuram, 243.
Dholl, 332.
Diseases, 16.
Dispensaries, 371.
District, alterations of, 2, 98.
„ , area of, 3.
Divisional charges, 3.
Dolmens, 168, 169, 204.
Dommera caste, 296.
Dost Ali, 29, 33, 34, 130.
Double crop lands, 96, 116, 119.
Dress, 260.
Dudékala caste, 275.
Dupleix, M., 34, 36, 42.
Dupleix-Fatteabad, 41.
Dyeing, 173, 247, 340.

Eastern Ghauts, 4.
Education, 256, 366.
Evangelical Lutheran Mission, 405.
Expenditure of district, 18.

Feræ naturæ, 11, 140, 164, 181, 198, 211, 218, 225, 237.
Fibres, 336.
Fish, 11.
Fishing castes, 288.
Flint, Lieut., 60, 61-62.
Food, 268, 315.
Forests, 9, 139, 156, 164, 181, 185, 211, 218, 224, 237, 243, 386.
French, 33, 42, 50, 57.
Fruit, 10, 186, 187.

Gándla caste, 269.
Garden lands, 121.
Garnets, 211.
Garrow, Mr., Collector of S. Division, 99.
Geological formations, 6.
Ghauts, Eastern, 4.
Gidambúr, 183.
Gingelly, 333.
Glass making, 141, 219, 346.
Godehen, M., 42.
Gólgonda, kings of, 25, 26.
Golla caste, 286.
Gold, 7, 244.
Gónagóru, 244.
Graham, Mr., Collector of S. Division, 98.
Gram, 333.
Grapes, 186, 187.
Grass mats, 343.
Græme, Mr., Collector, 94.
Green gram, 333.
Ground nuts, 334.
Gudiyátam Taluk, 179.
„ town, 181.
Gudipáti páliem, 75, 129-132.

Hemp, 336.
Holdings, agricultural, 307.
Horse gram, 333.
Hospitals, 371.
Houses, 262.
Hyder Ali, 54, 69, 163, 178.
Hyder Kalábana, 58.

Idiga caste, 286.
Idol-making, 140, 345.
Implements, agricultural, 319.
Indigo, 334.
Interest, rate of, 316.
Irrigation, 17, 307, 382.
Irula caste, 20, 300.
Iron, 7, 140, 157, 165, 173, 181, 186, 219, 237, 244, 247.

Jails, 359.
Jains, 21, 161, 178, 201, 202, 205, 215, 235, 259, 266.
Janapa Chetty caste, 270.
Jándra caste, 274.
Jangam caste, 292.
Jewádi hills, 5, 185, 209.
Jhógi caste, 292.
Jilladu úbre, 336.
Jínigar caste, 273.
Jonna, 331.
Jungles, 9, 139, 156, 164, 181, 185, 211, 218, 224, 237, 243, 386.

Kadapanattam, 43, 167.
Kálahastri town, 54, 220, 257.
„ Zemindári, 72, 125, 217.
„ Zemindars, 24, 43, 62, 64, 204, 216.
Kallavagunta, 162.
Kallúr Páliem, 75, 129-132.
„ Ghaut, 4, 26, 30, 45, 56.
Kamma caste, 278.
Kammála caste, 272.
Kambu, 330.
Kanakamma-chattram, 234.
Kandúr, 240.
Kangundi Zemindári, 72, 128, 241.
Karigeri ware, 181, 346.
Karkambádi Páliem, 52.
Karvótinagar, 227.
Karvétnagar Zemindári, 72, 125, 224.
„ Zemindars, 43, 62, 64, 222.
Kápu caste, 279.
Kávéripák village, 40, 45, 52, 175.
„ tank, 4, 171, 178.
Kavvaré caste, 277.

Kempula Páliem, 228, 230.
Kilapatla, 240.
Kistvaens, 168, 169, 204.
Kómati caste, 267.
Kondápuram, 8.
Koracha caste, 299.
Kóré mats, 186, 206, 247, 313..
Korra, 332.
Korrava caste, 299.
Kortalayár river, 8, 58, 173.
Krishnápuram Páliem, 2.
Kummara caste, 284.
Kunnatúr, 248.
Kupam, 244.
[illegible]um caste, 271.
Kurruba or Kurrumba caste, 21, 22, 162, 165, 176, 178, 181, 194, 212, 286.
Kurrumba dynasty, 1, 20, 176, 229.
Kursava caste, 284.
Kykala caste, 273.
Kylása-drúg, 5, 47, 65, 183, 196.

Labbay caste, 305.
Labourdonnais, M., 33.
Lálapet, 174.
Lally, Count, 43, 45.
Lambádi caste, 296.
Langári caste, 275.
Langerkháns Funds, 190, 372.
Languages, 256, 265.
Laterite, 7.
Lawrence, Major, 41.
Leather, 349.
„ workers, 303.
Lime, 7, 140, 157, 173, 181, 186, 198, 219, 237, 244.
Linga Balija caste, 269.
Load stones, 211.
Local Funds, 361.
Lovell, Mr., Collector, 386.

Macchakotté, 332.
Macleod, Major, Collector of S. Division, 100.
Maddúr, 227.
Máderpák Division, 7, 217.
„ town, 222.
Mádiga caste, 303.
Magisterial-Courts, 353.
Magnetic iron ore, 7, 211.
Mahadévamangalam, 162.
Mahadévamalai, 184.
Mahendravádi, 21, 178.
Mahommed Ali, 32, 36, 37, 41, 42, 43, 44, 52, 53, 66, 73.
Mahommedans, 305.
Mahommedan, early invasion, 22.
„ revenue system, 91.
Mahommed Kamul, 42.
Mahratta invasions, 30, 43.
„ castes, 283.
Maize, 331.
Mála caste, 303.
Malayáli caste, 281.
Mámandúr village, 203.
„ tank, 4, [illegible], 203.
„ [illegible]a, 2.
Mandakollattur, 213.
Mánellúr, 222.
Mangala caste, 285.
Mangoes, 10, 158, 187.
Mániems, 90, 105.
Manufactures, 14, 140, 227, 338.
Manure, 315.
Marammat Department, 381.
Markets, 378.
Measures, 96, 409.
Médara caste, 299.
Mélpádi, 161.
Mélvisháram, 201.
Mendicant castes, 290.
Ménkávelly system, 353.
Méra, 95, 96, 101, 122.
Merási system, 89.
Minerals, 7, 140, 157, 165, 173, 181, 186, 198, 211, 219, 237, 244, 247.
Missions, 402.
Mogaráta village, 80.
„ páliem, 75, 129-131.
Mokkácholum, 331.
Mondi caste, 293.
Monsoons, 308.
Mortiz Ali, 31, 32, 42, 43, 50, 53, 163, 190.
Móturfa tax, 123.
Mozuffer Jung, 35, 36, 37.
Muglee village, 159.
„ ghaut, 4, 71.
Municipalities, 379.
Munro, Sir Hector, 58.
Mussulmans, 305.
Muttarása caste, 283.
Mysore plateau, 4.
„ , first war, 55.
„ , second „ 57.
„ , third „ 71.
„ , fourth „ 73.

Nágaptla, 78, 137.
Nagari village, 231.
„ hills, 5, 217, 224.
„ river, 8, 225.
Naikenéri village, 169.
„ ghaut, 5, 56, 71, 169.
Nakshattrakóvil, 213.
Náraganti Páliem, 75, 129-132.
Náragallu, 162.
Náráyanavanam town, 20, 22, 228.
„ river, 8, 218.
Narsingráyanipet, 69, 162.
Nazeabulla, 50.
Názir Jung, 36, 200.
Nizam, 28, 29, 32, 36, 54, 55, 56.
Nizbet, Mr., Collector, 113.

Occupations, 255.
Ogilvie, Mr., Collector, 116.
Oil Mongers, 269.
Oil-pressing, 348.
Oranges, 183.
Outturn, agricultural, 312.

Padavéd, 20, 208, 211, 212.
Padiáls, 260, 318.
Paddy, 324.
Pákála Páliem, 75, 129-131.
Palabhógam village, 89.
Pálár river, 7, 171, 194.
„ anicut, 171, 197, 202.

Pallava kings, 20.
Pallikonda, 193.
Pallipat, 66, 233.
Palmanér Taluk, 73, 164.
„ town, 165.
Panasiva caste, 292.
Pandáram caste, 292.
Pándava's temples, 168, 169, 204, 288.
Panchapándavamalai, 202.
Paper-making, 186, 347.
Pardarámi, 159.
Pariah caste, 303.
Pasankarei tenure, 89.
Passes, 4.
Patnúlkár caste, 274.
Pattadapáchal, 121.
Páyikáries, 89.
Peddapaidi-drúg, 56, 169.
Pennalúr, 222.
Peranámbatt, 183.
Perambákam, 58.
Péshcush, 125.
Plantain, 329.
Poiny or Ponné river, 8, 138, 155, 171, 188.
„ „ anicut 172, 179.
„ „ village, 162.
Police, 353.
Poligars' war, 77, 131.
Pólúr Taluk, 209.
„ town, 212.
„ village, 63, 66.
Ponies, 17.
Population, 249.
Post Office, 383.
Potters, 284.
Pottarei, 211.
Pottery, 181, 247, 346.
Prices, 318.
Printing, 350.
Produce, agricultural, 312.
Profits, „ 316.
Proverbs, „ 310.
Public Works Department, 381.
Púját caste, 290.
Pullalúr, 58, 62.
Pulicat, 2, 20, 58.
Pulicherla Páliem, 30, 75, 129-132.
Pullúr Páliem, 75, 129-131.
Punganúr Zemindári, 2, 73, 126, 235.
„ town, 236, 239.
Púthalpat, 162.
Puttadars, 306.
Puttúr, 232.
Pymaish, N. Taluks, 94, 115.
„ S. Taluks, 102, 114.

Rági, 330.
Railways, 12, 19, 400.
Rainfall, 16, 308.
Rajah Sahib, 38.
Rájput caste, 267.
Rállabudagúr, 244.
Rámakrishnamarájapet, 235.
Rámasamudram, 240.
Rangári caste, 275.
Ránipét, 175.
Ravenshaw, Mr., Collector of S. Division, 101.
Ráyalcheruvu, 232.
Ráyoji, 59, 114, 174, 176.
Rázu caste, 223, 266.
Reddi caste, 279.
Religions, 257.
Revenue, 18, 134.
Rice, 324.
Rivers, 7.
Roads, 13, 137, 157, 165, 173, 174, 181, 187, 198, 206, 212, 220, 227, 238, 244, 247, 364.
Roberts, Mr., Collector, 115.
Robinson, Mr. J. D., Collector, 120, 144, 366, 386.
Roman Catholic Missions, 406.
Rosolle, 336.
Ryotwári settlement, 93, 105, 106, 111,

Sadatulla Khán, 29, 33, 175, 200, 201.
Saffron (Turmeric), 337.
Sajja, 330.
Sákala caste, 285.
Sálava, 51, 223.
Sália caste, 274.
Saltpetre, 186, 196.
Sambadava caste, 289.
Sámé, 332.
Sána caste, 286.
Sandstones, 6, 140.
Sanitation, 378.
Sátáni caste, 290.
Sátghur, 70, 182.
Sattiavijianagaram, 248.
Sattiavéd Taluk, 2.
Schools, 366.
Scotch Church Mission, 405.
Seasons, 308.
Sénia caste, 274.
Sheep, 17, 165.
Shepherd castes, 286.
Shoe-making, 211, 212.
Shólinghur, 21, 63, 176.
Silk, 14, 158, 339.
Sivaji, 26.
Siyamangalam, 208.
Slavery, 260, 318.
Smith, Colonel, 55.
Snakes, 11.
Soapstone, 157.
Soudapalle, 240.
Stone-cutting, 173, 227.
Stratton, Mr. G., Collector, 74, 92, 131.
Sufder Ali, 30, 31.
Sugáli caste, 296.
Sugar cane, 326.
Survey of N. Taluks, 94, 115.
„ of S. „ 102, 114.
Suvarnamukki river, 9, 138, 218.
Synigunta Ghaut, 5.

Taluks, 2, 3.
Tanning, 198, 349.
Tanks, 4, 307.
Teazgári, 99, 104.
Telikóta, battle
Temperature, 4,
Téné, 332.
Tháda caste, 291.
Thalapulla Ghaut, 43, 167.
Thellár, 208.
Timiri, 40, 45, 50, 202.

Tippu, 58, 62, 68, 69, 71, 72, 73, 191, 200.
Tippu, tombs of family, 193.
Tiruchanúr, 154.
Tirumala or Upper Tirupati, 146.
Tirumalai, 215.
Tirupati, Lower, 22, 42, 50, 51, 52, 53, 78, 142.
Tirupati, Upper, 46, 50, 52, 78, 146, 229.
„ hills, 138, 140.
Tirutani town, 63, 232.
„ river, 8, 225.
Tiruválangád, 234.
Tiruvallam, 183.
Tiruvettúr, 53, 201.
Tobacco, 336.
Toddy-drawers, 286.
Toys, lac-coloured, 347.
Trade, 18.
Trading castes, 267.
Traffic, 13, 401.
Travellers' Bungalows, 378.
Trees, timber, 10, 391.
Tuckia Sahib, 32, 41, 46.
Tumba Páliem, 75, 129–132.
Tumuli, 159, 162, 204, 215.
Turmeric, 337.

Uppara caste, 299.

Vaccination, 375.
Vagirivélu caste, 297.
Vallimalai, 21, 161.
Value of land, 317.
Valluva caste, 293.
Vannán „ 285.
Vánia „ 269.
Vannia „ 280.
Váram, 90, 316.
Varagu, 332.
Velkúr, 158.
Vellála caste, 21, 89, 277.
Vellama caste, 278.
Vellore Taluk, 184.
„ town, 23, 25, 27, 28, 30, 31, 32, 43, 53, 55, 58, 60, 62, 63, 64, 67, 71, 87, 88, 158, 187.
Vellore mutiny, 81.
„ Municipality, 379.
Venkatagiri, 159.
Venkatagirikóta, 56, 73, 166.
Village lease, three years, 106.
„ „ ten years, 109.
„ rents, 92, 104.
„ servants, 90, 122.
Vijialápuram, 244.
Vijianagar kingdom, 21, 22, 23, 24, 92, 189 229.
Virinjipuram, 66, 194.

Wages, 319.
Wahabis, 87, 259.
Wálájá Taluk, 170.
Wálájápet town, 174, 199.
„ Municipality, 380.
Wandiwash Taluk, 204.
„ town, 32, 41, 44, 46, 47, 55, 60, 62, 68, 69, 206.
Washerman caste, 285.
Water-lifts, 319.
Weaving, 14, 157, 165, 173, 181, 186, 198, 206, 211, 222, 227, 237, 247, 338.
Weaving castes, 273.
Weights, 409.
Wells, 121, 307.
Wild beasts, 11, 140, 164, 181, 198, 211, 218, 225, 237.
Wodda caste, 298.

Yádava kings, 22, 145, 229.
Yánádi caste, 20, 301.
Yedaragunta Poligar, 75.
Yedaya caste, 286.
Yékabhógam tenure, 89.
Yékari caste, 283.
Yerkam fibre, 336.
Yérpet, 222.
Yield, agricultural, 312.

Zemindáries, 125.
Zulfikar Khán, 28, 190.